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This invention describes novel synthetic peptides (I) derived from the regulatory viral protein R (Vpr) of human immunodeficiency virus-1 (HIV-1) which have antiviral activity and can be used for gene therapy. (I) is used for therapeutic and/or diagnostic purposes, especially in biological assays, for development of serological tests or enzyme-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 3.2; Page 5; 35pp; German.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human immunodeficiency virus 1.
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99DE-01008766
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB10686 standard; peptide;
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19-FEB-1999;
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Abr42471 HIV viral
Aar48961 NL4-3 VPR
Aar48963 HIV VPR.
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HIV-1 Vpr
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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1 MEQAPEDQGPQREPYNEWTL.....SEAVRHFPRIWLHNLGQHIY
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(c) 1993 - 2004 Compugen Ltd.
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Listing first 45 summaries
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                                                                                                                 October 18, 2004, 18:31:42
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HIV vpr m
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Native Vp
Native Vp
HIV Alos
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HIV A30L
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   AA952250
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              AAO30515
AAO30516
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AAO30517
AAO30518
AAO30518
AAO30517
AAW99918
AAW99104
AAV99104
AAV99104
AAV99104
   AAY53250
AAB85995
AAO30521
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Sequence:

Run on:

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Searched:

Minimum Maximum Database

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Regulatory virus protein R; Vpr; antiviral; gene therapy; pathogenicity; structural analysis; cell cycle arrest.
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                                                                                                                                                                                                           HIV-1 regulatory virus protein R peptide sVpr1-47.
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Result Š

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immunosorbent assays (ELISA) (e.g. for detecting or quantifying Vpr in blood), to raise specific antibodies and antiera (especially those reactive with specific epitopes), and as antivival agents. (i) can also be used in screening for potential Vpr antigonists (i.e. compounds that modulate interaction of Vpr with cellular factors, transcription-cativating properties of Vpr, transport of Vpr and its incorporation into viral particles, Vpr-induced cell cycle arrest, and cytotoxic and ion-channel activities of Vpr. (I) is used to establish cell or animal models for studying pathogenicity of Vpr, for structural analysis of Vpr in vitro or in vivo, for complementing the function of Vpr-defect mutants in vivo, for complementing the function of Vpr-defect mutants in cell cultures, and to reduce flexibility of Vpr induced by the N-formulated as highly concentrated solutions (mmolar) without protein aggregation, so are well suited to analysis by nuclear magnetic resonance, X-ray or circular dichroism techniques. (I) adopt a folded cran be produced, at high purity, on the milligram scale. This sequence is the synthetic (HV-I) derived Vpr peptide sVprI-47 which is used is the model.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the invention
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Sequence 47 AA;

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                             Gaps
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100.0%; Score 262; DB 3; Length 47; 100.0%; Pred. No. 2.9e-26;
                                                                      MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLINLGQHIY
                          Indels
                                                      1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
                          0; Mismatches
                           47; Conservative
           Local Similarity
Query Match
                          Matches
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HIV; viral protein R; Vpr; lentiviral R protein; anti-HIV; virucide. ABR42471 standard; protein; 60 AA Human immunodeficiency virus. HIV viral protein R (aa-160) (first entry) 11-AUG-2003 ABR42471; RESULT 2 ABR42471

17. .29 /note= "alpha-helix 1" Location/Qualifiers 36. .47 /note= "¿ Region

WO2003038056-A2.

Region

"alpha-helix-2"

08-MAY-2003

31-OCT-2002; 2002WO-US035110.

02-NOV-2001; 2001US-0350168P

(REGC) UNIV CALIFORNIA.

Identifying an agent that induces Vpr loss in a lentivirus-infected cell, useful for treating lentiviral infections by determining the effect of the test agent contacted with a cell that produces Vpr protein on the level of Vpr in the cell. WPI; 2003-468412/44. Bruns K;

Wray V, Tessmer U, Henklein P;

Schubert U,

Greene WC,

Sherman M,

This sequence is encoded by a PCR fragment of NL4-3 and represents the N-terminal peptide fragment of the full length VPR protein. The DNA encoding this fragment was ligated into Clal/Sall digested pX and the corresponding plasmid was used to produce the antisense virus of the invention. Antisense or truncated RNAs expressed by these viruses bind to the mRNAs expressed by the naturally occurring viruses (Novs) and prevent the mRNAs from being translated into proteins, thereby preventing the VFV from replicating. The antisense viruses maintain the infectivity of the NOVS, allowing antisense RNAs to reach the mRNAs of the natural viruses. Antisense viruses such as these may be used for treating or preventing a viral infection, particularly HIV-1, HIV-2 or SIV infection or hepatitis

Disclosure, Page 108, 167pp, English.

Example 5; Fig 4; 44pp; English

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       The present sequence is that of amino acids 1-60 of HIV viral protein R Vipr, also called lentiviral R protein). Vpr is incorporated into the HIV virion and helps to target the viral preintegration complex to the nucleus in nondividing cells through its nuclear localisation signal. It is also responsible for arresting HIV infected cells in the G2 phase of the cell cycle, which results in increased virus production. The invention provides methods for identifying compounds that induce loss of Vpr in a eukaryotic cell, and methods for identifying compounds that catalyses cistrans isomerization of cis-peptidylprolyl bonds in Vpr. Such compounds are useful for treating lentiviral infections, including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense viruses and anti:sense-ribozyme viruses - used for treating or preventing viral infections, partic. HIV-1, HIV-2 or SIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV-1, HXB2, antisense, sequence inversion; antisense virus; infection; naturally occuring virus; NOV; translation; replication; infectivity; hepatitis B; HIV-2; SIV; flip-over PCR.
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                                                                                                                                                                                                                                                                                            100.0%; Score 262; DB 7; Length 60; 100.0%; Pred. No. 3.8e-26;
                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                             1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                            AAR48961 standard; protein; 79 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NL4-3 VPR N-terminal peptide.
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                                                                                                                                                                                                                                   Best Local Similarity
Matches 47; Conser
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                                                                                                                                                                                            Sequence 60 AA;
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AAW53040 standard, peptide; 96 AA.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents the "perfect" VPR protein encoded by the PCR fragment of px-CS which encodeds the truncated gag gene and the "perfect" vpr gene. The CDNA fragment encoding this protein was used to produce the antisense virus of the invention. Antisense or truncated RNAs expressed by these viruses bind to the mRNAs expressed by the naturally occuring viruses (NOVs) and prevent the mRNAs expressed by the naturally occuring thereby preventing the NOV from replicating. The antisense viruses maintain the infectivity of the NOVs, allowing antisense RNAs to reach the mRNAs of the natural viruses. Antisense viruses such set the mRNAs for the natural viruses. Antisense viruses may be used for treating or preventing a viral infection, particularly HIV-1, HIV-2 or SIV infection or hepatitis B infection. (Updated on 25-MAR-2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense viruses and anti:sense-ribozyme viruses - used for treating or preventing viral infections, partic. HIV-1, HIV-2 or SIV infection.
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                                                           Length 79;
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 B infection. (Updated on 25-MAR-2003 to correct PN field.)
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                                                         100.0%; Score 262; DB 2;
100.0%; Pred. No. 5.3e-26;
iive 0; Mismatches 0;
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(first entry)
                                                                        1 Similarity 100.
47; Conservative
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Best Local Similarity
47; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1994-065685/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYHA-) UNIV HAWAII.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAQ48962.
                              Sequence 79 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 96 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hu W, Wang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JUL-1993;
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                                                                                                                                                                                                                                                                                         25-MAR-2003
12-SEP-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                        Query Match
Best Local S
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                                                                                                                                                                                                                                                                                                                                      HIV VPR.
                                                                                         Matches
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This sequence is a HIV-1 polypeptide that can be used in a recombinant plant virus used in the process of the invention. The process is for administering a polypeptide to an animal compilating: (a) infecting a plant cell with recombinant plant virus nucleic acid that will be processed in a plant cell to produce a fusion capsid protein (FCP), the processed in a plant virus capsid protein (FCP), the processed in a plant virus capsid protein (FCP), the processed in a plant virus capsid protein (FCP), the protein (FCP) the pVCP being an alfalfa mosaic virus (AlMV) capsid protein (FCP) the pVCP being an alfalfa mosaic virus (AlMV) capsid protein (FCP) the pVCP being an alfalfa mosaic virus (AlMV) capsid protein (FCP) in a derivative cell derived from the cultivating the infected cell, or a derivative cell makes the FCP; and (c) administering the FCP or a portion to an animal. The recombinant plant virus can also be used for production of polypeptides which can be used particularly for the production of polypeptides which can be used for immunisation against pathogens such as that a plant virus can also be tabled to a portion to a conjugation of the production of the pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Production of poly:peptide(s), particularly for use in vaccines - by expression as fusion proteins with plant virus capsid protein in plant cells infected with virus.
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                                                                                                                                                                                                       Recombinant plant virus; HIV-1; protein production; immunisation;
fusion capsid protein; alfalfa mosaic virus; ilarvirus; pathogen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           / Match 100.0%; Score 262; DB 2; Length 96; Local Similarity 100.0%; Pred. No. 6.6e-26; No. 47; Conservative 0; Mismatches 0; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Koprowski H, Hooper DC, Yusibov V, Modelska A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 4; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB10049 standard; protein; 96 AA
                                                                                                                                                                                                                                                                                                          Human immunodefictency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYJE-) UNIV JEFFERSON THOMAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97WO-US015200.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-00704856.
                                                                                                        (first entry)
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(first entry)
                                                                            (revised)
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                                                                                                                                                      HIV-1 polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 96 AA;
                                                                                                                                                                                                                                                                                                                                                                 WO9808375-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-AUG-1996;
                                                                         17-OCT-2003
17-JUL-1998
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02-NOV-2000
                                                                                                                                                                                                                                                            rhabdovirus
                                                                                                                                                                                                                                                                                                                                                                                                                        05-MAR-1998
                        AAW53040;
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Matches
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AAB10049
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                                                             in; gag; pol; GP-1; GP-2; anti-HIV; cytostatic; gene therapy; infectious disease; HIV; AIDS; neoplasm; carcinoma; melanoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regulatory virus protein R; Vpr; antiviral; gene therapy; pathogenicity; structural analysis; cell cycle arrest.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New retroviral packing cell useful as pharmaceutical carrier in gene therapy for treatment of HIV and neoplasms, comprises retroviral genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV-1 regulatory virus protein R peptide sVpr1-96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 262; DB 3;
100.0%; Pred. No. 6.6e-26;
rative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAA40298, AAB10053, AAB10054.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 44; 69pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ä.
                                                                                                                                                                                        Human immunodeficiency virus 1.
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                                                                                                                                                                                                                                                                                                                                                                              99EP-00250415
                                                                                                                                                                                                                                                                                                                                                                                                                                     98DE-01056463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PETT-) PETTE INST HEINRICH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-378268/33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and glycoproteins.
HIV-1 vpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 96 AA;
                                                             Glycoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200049038-A2
                                                                                                                                                                                                                                               EP1006196-A2
                                                                                                                       vpr protein.
                                                                                                                                                                                                                                                                                                                                                                           25-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                     26-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jon Laer MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-AUG-2000
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Best Local S
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Matches

RESULT 7

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This invention describes novel synthetic peptides (I) derived from the regulatory viral protein R (Vpr) of human immunodeficiency virus-1 (HIV-1) which have antiviral activity and can be used for gene therapy. (I) is used for therapeutic and/or diagnostic purposes, especially in biological assays, for development of serological tests or enzyme-linked assays (ELISA) (e.g. for detecting or quantifying Vpr in blood), to raise specific antibodies and antisera (especially those reactive with specific epitopes), and as antiviral agence. (I) can also be used in screening for potential Vpr antagonists (i.e. compounds that modulate interaction of Vpr with cellular factors, transcription-cativating properties of Vpr, transport of Vpr and its incorporation into viral particles of Vpr, transport of Vpr and its incorporation into cativating properties of Vpr, transport of Vpr and its incorporation into cativating pathogenicity of Vpr, for structural analysis of Vpr and its domains, for in vitro assembly of new vectors for gene therapy, and its domains, for or onglementing the function of Vpr-defect mutants in vivo, for complementing the function of Vpr-defect mutants in call cultures, and to reduce flexibility of Vpr induced by the N-terminal domain. Synthetic (I), are soluble in water and can be concentrated solutions (mmolar) without protein aggregation, so are well suited to analysis by nuclear magnetic resonance, X-ray or circular dichroism techniques. (I) adopt a folded structure, have biological activity comparable to that of viral Vpr, and can be produced, at high purity, on the milligram scale. This sequence represents the synthetic HIV-1 derived Vpr peptide sVprI-96 which is used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus type 1; HIV-1; auxiliary protein; cancer; Vpr protein; regulatory protein; pathogen; cell proliferation; therapy; dysregulated cell growth; hyperproliferative cell disorder; malignancy; radiation therapy; psorlasis; transgene expression; immune response; cytostatic; apoptotic.
                                                                                                                                                                                                                                                                                New synthetic peptides from the Vpr protein of human immune deficiency virus, useful e.g. for therapy and diagnosis, have good solubility in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 262; DB 3; Length 9
100.0%; Pred. No. 6.6e-26;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human immunodeficiency virus type 1 (HIV-1) sVpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
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                                                                                                                                                                                                                                                                                                                                                                   Claim 3.1; Page 5; 35pp; German.
                                        99DE-01008752,
99DE-01008766,
19-FEB-2000; 2000WO-DE000525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
(first entry)
                                                                                                                                                                                            Henklein P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     47; Conservative
                                                                                                        SCHUBERT U. HENKLEIN P.
                                                                                                                                                                                                                                       WPI; 2000-565367/52.
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                                                                                                        SCHU/) SCHUBERT
                                                                                                                                                   WRAY/) WRAY V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 96 AA;
                                        19-FEB-1999;
19-FEB-1999;
                                                                                                                                                                                            Schubert U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-AUG-2003
26-MAR-2002
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                                                                                                                            (HENK/)
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AAE16129
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Delivering molecule into cell for inhibiting cell proliferation and killing target cell, comprises contacting cell with Vpr polypeptide, regulatory protein encoded by HIV type 1, alone or conjugated to
                                                                                                                                                                                  De Noronha CMC;
                                                                                                                                                                                  Greene WC,
                      17. .29
/label= Alpha_1_helix
                                    36. .47
/label= Alpha_2_helix
                                                                                                                                                                                 Sherman MP,
                                                   53. .78 _____/label= Alpha_3_helix
               Location/Qualifiers
                                                                                                                                                                                                                                                   Example 1; Fig 1A; 72pp; English.
Human immunodeficiency virus 1.
                                                                                                                                                    GLADSTONE INST J DAVID
                                                                                                                     23-MAY-2000; 2000US-0206610P.
39-PEB-2001; 2001US-0267827P.
20-APR-2001; 2001US-00839329.
                                                                                                       23-MAY-2001; 2001WO-US016943.
                                                                                                                                                                                 Henklein P,
                                                                                                                                                                                                WPI; 2002-083087/11
                                                                                                                                                           (SCHU/) SCHUBERT U. (HENK/) HENKLEIN P.
                                                                          WO200190159-A2
                                                                                                                     23-MAY-2000;
09-FBB-2001;
                                                                                                                                                                                 Schubert U,
                                                                                        29-NOV-2001
                                                                                                                                                    GLAD-)
                                     Region
                       Region
                                                    Region
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The present the attention because to compositions up to Delippintes and integrated to a therapeutic molecule. Why polypopides are regulatory or auxiliary proteins encoded by a lentivirus, human immunodeficiency virus type I (HIV-1). The invention also relates to a method for delivering a molecule into a cell which comprises contacting the cell with a conjugate comparising a volypeptide conjugated to the molecule. The method is cusful for delivering a polypeptide, polynucleotide (DNA or RNA) or a toxin into a cell, preferably a cancer cell, or a cell infected with a pathogen such as lentivirus, HIV or retrovirus, bacterium or a parasite. Compositions comprising Vpr polypeptide conjugated to a toxin is useful for the further conjugated to a regulatory molecule and the contact with the target cell or a cell infected with a pathogen where the toxin is further conjugated to a regulatory molecule and the contact with the target cell exerts an effect on the regulatory molecule that results in activation of the toxin. The method is useful for inhibiting cell growth in a subject. Wpr polypeptides when administered alone are useful growth in a subject. Wpr polypeptides when administered alone are useful cor adiation therapy in a subject undergoing radiation therapy. They can also be used to treat hyperproliferative cell growth decreasing molecule growth. Wpr polypeptides conjugated to a cancer of the accessing an immune response. The present sequence is synthetic Vpr for in a cell. Wpr polypeptides alone or conjugated to an antigen is useful for increasing an immune response. The present sequence is synthetic Vpr for law or the present sequence is synthetic Vpr for law or the present sequence is synthetic Vpr for law or the present sequence is synthetic Vpr for law or the present sequence is synthetic Vpr law or the present sequence is synthetic vpresented to an antigen is useful for molecule or the present sequence is synthetic vpresented to the present sequence or conjugated to an antigen is useful to a present sequenc
present invention relates to compositions comprising Vpr polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein from HIV-1. (Updated on 29-AUG-2003 to standardise OS
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100.0%; Score 262; DB 5; Length 96; 100.0%; Pred. No. 6.6e-26; ive 0; Mismatches 0; Indels
                                                                        MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                                                                          MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                    47; Conservative
Query Match
Best Local Similarity
Matches 47; Conserv
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RESULT

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The present invention describes a chimeric bifunctional molecule (I) comprising at least a first functional molecule covalently linked to a second functional molecule, which is able to modulate the activity of the permeability transition pore complex (PPPC) of the mitochondria. (I) has the function of specifically targeting and entering a tissue cell opputation. The second functional molecule has the function of specifically targeting and entering a tissue cell specifically targeting, and inducing or the closing of the PTPC of the mitochondria or its fragment. (I) has virucide, neuroprotective, vasorropic and cytostatic activities, and can be used as a mitochondrial permeability transition pore complex (PTPC) modulator. (I) is useful for treating or preventing a pathological infection or disease. (I) is also treating or preventing cell death regulatory molecules, specifically the apoptogenic function of the PTPC. for treating e.g. cancer, lachaemia, neurodegenerative diseases, fulminant hepatifis or viral infections. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present sequence represents the HIV-1 viral protein R (Vpr) amino acid sequence, which is given in the exemplification of the present invention. (Updated on 29-AUG-2003 to standardise OS field)
                                                                                                                                                                                         permeability transition pore complex; virucide; neuroprotective; vasotropic, cytostatic; infection; cell death regularion; apoptosis; mitochondrial permeability transition pore complex modulator; cancer; apoptogenic; ischaemia; neurodegenerative disease; fulminant hepatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and
pore
e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New chimeric bifunctional molecules that target specific cells regulate the apoptosis function of the permeability transition complex of the mitochondria, useful for treating or preventing cancer or ischemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 5, Length 96;
                                                                                                                                                                       permeabilisation; mitochondrion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 262, DB 5,
Pred. No. 6.6e-26;
0; Mismatches 0;
                                                                                                                                   HIV-1 viral protein R (Vpr) amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure, Page 13, 76pp, English.
ABP56175 standard; peptide; 96 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Briand J;
                                                                                                                                                                                                                                                                                        Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                           01-FEB-2002; 2002WO-EP001633.
                                                                                                                                                                                                                                                                                                                                                                                                                                                02-FEB-2001; 2001US-0265594P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.04;
                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (INSP ) INST PASTEUR.
(CNRS ) CENT NAT RECH SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jacotot E,
                                                                                                                                                                         membrane
                                                                            (revised)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 96 AA;
                                                                                                                                                                                                                                                                                                                               WO200261105-A2
                                                                                                                                                                         Mitochondrial
                                                                          29-AUG-2003
28-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Edelman L,
                                                                                                                                                                                                                                                                                                                                                                     08-AUG-2002
                                      ABP56175;
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Ş ADD01277 standard; protein; 96 RESULT 10 ADD01277 ü

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1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY

100.001

Local Similarity 100.

Matches

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1 MEQAPEDQGPOREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47

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(first entry)

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(MEDI-) MEDICIS VENTURES MANAGEMENT GMBH.
               HIV-1 Vpr CyPA protein binding motif.
                                        Human immunodeficiency virus 1.
                                                           25-OCT-2002; 2002WO-DE004052
                                                                 25-OCT-2001; 2001DE-01053902
                                                                              Tessmer U,
                                                                                    WPI; 2003-430506/40
                                              WO2003038032-A2.
         01-JAN-2004
                                                     08-MAY-2003
   ADD01277;
                                                                             Will H,
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Bruns K;

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This invention describes a novel agent (A), for inhibiting the primate C lentivirus protein R (Vpr) of HIV-1 or -2, or simian immune deficiency virus, compitaing an inhibitor (I) of cellular chaperones (II) that are essential for proper folding, stability and, thus, biological function of essential for proper folding, stability and, thus, biological function of cyclophilins include cyclosporin A, FK506, rapamycin and the noncommuniation of the cyclophilin and comparison of the cyclophilin and the N-terminus of Vpr. The inhibitor prevents of proline peptidyl bonds in the N-terminus of Vpr. The inhibitor prevents of cis-trans rearrangement, specifically of Pro residues at positions 5, 10, 10 and 35 of Vpr. The inhibitor may also act by a process in which Cypa co-translationally regulates expression, folding and stability of Vpr and co-translational process is active in cells transfected with the specified viruses, with DNA that encodes Vpr, or with recombinant Vpr-cencing viruses in the season, folding and stability of Vpr and specified viruses, with DNA that encodes Vpr, or with recombinant Vpr-cencing of Vpr (induction of Gall-cycle arrest, apoptosis, increased virtual production of cell-cycle arrest, apoptosis, increased virtual production and co-activation of glucocorticoid receptors) are combination with other antiretroviral agents; blockers of reverse combination with other antiretroviral agents; blockers of reverse transcription and/or portpheral CD4+ lymphocytes, especially in advanced transcription and/or peripheral calls and endethelial cells in cells and certain is used to prevent and continuation with where asserted nephrotecopies of the invention is used to prevent and continual infections, specifically AIDs or HIV infections (infection of neurons, glial cells and endethelial cells in cerebral contaminated blood. This sequence represents the contaminated b
Agent for inhibiting lentivirus Vpr protein, useful for treatment and prevention of infection by human immune deficiency virus, is inhibitor of
                                                                                                                                                                                                                                               Disclosure; Fig 4; 41pp; German.
                                                                                                                           chaperone enzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 96 AA;
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Query Match 100. Best Local Similarity 100. Matches 47; Conservative

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Gaps

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The invention relates to a method of producing a recombinant HIV-1 virus protein R (Vpr) protein or a protein having one or more substitutions, additions or alterations and having biological activity, by transforming a host Escherichia coli cell with an expression vector containing the gene encoding Vpr, and culturing the transformed cell. The method is preful for producing recombinant Vpr protein. The protein is useful for production of immunodeficiency virus in oell, tissue or organ derived from an organism. The protein is useful for functional analysis of the Vpr protein. This sequence represents the HIV-1 Vpr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Producing recombinant virus protein R (Vpr), useful in promoting immunodeficiency virus reproduction, involves transforming a host with an expression vector for the protein.
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1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 96;
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100.0%; Pred. No. 6.6e-26;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                   virus protein R; Vpr; functional analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV; Vpr; modulator; anti-HIV; virucide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABM79669 standard; protein; 96 AA.
                                                                                                                                                                                                                                                                    Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                    12-MAR-2002; 2002JP-00066938.
                                                                                                                                                                                                                                                                                                                                                                    12-MAR-2002; 2002JP-00066938
                                                                                               ADF46812 standard; protein;
                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAKAMURA T.
                                                                                                                                                                                               HIV-1 Vpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV-1 Vpr protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 96 AA;
                                                                                                                                                                 12-FEB-2004
                                                                                                                                                                                                                                                                                                                                      16-SEP-2003.
                                                                                                                                 ADF46812;
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                                                                               ADF46812
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                                                                   lentivirus protein R; Vpr; inhibitor; cellular chaperone; folding; stability; cyclophilin A; CyPA; cell-cycle arrest; apoptosis; ephrotropic; glucocorticod receptor coactivation; anti-HIV; nootropic; nephrotropic; antilipemic; antirecroviral; AIDS; infection; HIV-induced dementia; lipodystrophy syndrome; lipid metabolism; HIV-associated nephropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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cell

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The specification describes a method of determining the influence of variation in host genes on selection of microorganisms with protein substitutions. The method comprises typing all individuals of a substitutions. The method comprises typing all individuals of a useful computation of patients infected with a microorganism for at least one selected intrinsic polymorphic marker involved in the host response to the presence of the microorganism. The method is useful for examining selective pressures confronting awde range of organisms that exhibit pathogenic traits in a host, such as bacteria, fundi, mycobacterium, viruses and viruses confronting a wide range of organisms that have adapted to evolve rapidly, including HIV and AIDS related viruses and the hepatitis related viruses such as HCV and HBV. The method is useful for designing a vaccine to prevent or delay the emergence of drug resistance in patients treated with a particular drug specific for a microorganism where the drug affects the replication of the microorganism at the protein end of the drug affects the replication of the microorganism at the protein, which is expected to provide optimal cytocoxic T lymphocyte protein, which is expected to provide optimal cytocoxic T lymphocyte (CIL) induced therapeutic protection to the cohort examined in that study
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel genomic nucleic acids of non-subtype B human immunodeficiency virus type 1 useful for detecting and treating AIDS comprises a specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present in invention provides the protein and coding sequences for a number of human immunodeficiency virus (HIV) type 1 non-subtype B
microorganisms with protein substitutions, comprises typing individuals of a cohort infected with a microorganism for an intrinsic polymorphic marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HIV-1; human immunodeficiency virus; non-subtype B; gag; pol; env; vpu;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHGLGQHIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 256; DB 6; L/
Pred. No. 3.9e-25;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIV-1 non-subtype B clone 93BR029-4 vpr protein.
                                                                                    Page 89; 157pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB69306 standard; protein; 96 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 41; Fig 17; 131pp; English.
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Local Similarity 97.9%;
Les 46; Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 96 AA,
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20-APR-2001
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                                                                                    Claim 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB69306;
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Matches
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                                                                                                                                                                                                                                                                                                                                          New polypeptides that bind to viral Vpr protein, useful for treatment, prevention, diagnosis and prognosis of immune deficiency virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to peptide which are capable of binding to the HIV protein Upr and/or modulates Upr-related activity. Such peptides are used for prevention, treatment, diagnosis and prognosis of Upr-related diseases, particularly lentiviral infection (specifically HIV-1 or -2, or simian immune deficiency virus), for modulating, particularly inhibiting, Vpr-related activities and for detecting Vpr in a sample. Nucleic acids encoding such peptides and cells that contain this nucleic acid can also be used therapoutically. The present sequence is a protein of relevance to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Determining the influence of variation in host genes on the selection of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polymorphic marker; host response; HIV; AIDS related virus; vaccine; hepatitis related virus; HCV; HBV; drug resistance; vpr.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 96;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 262; DB 8;
100.0%; Pred. No. 6.6e-26;
ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amino acid sequence of a HIV vpr protein.
                                                                                                                                                                                                                                                                 Lemay
                                                                                                                                                                                                                                                                                                                                                                                                 Example 20; Page 33-34; 143pp; English
                        Human immunodeficiency virus type 1.
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                                                                                                                                                                                                                                                             Belhumeur P,
                                                                                                                                          07-MAR-2003; 2003WO-CA000325
                                                                                                                                                                                 38-MAR-2002; 2002US-0362384P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-OCT-2002; 2002WO-AU001450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-OCT-2001; 2001AU-00008425
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                                                                                                                                                                                                                      (UYMO-) UNIV MONTREAL
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Best Local Similarity
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                                                           WO2003076621-A2
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                                                                                                                                                                                                                                                           Cohen EA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a method for detecting immunodeficiency virus in a sample in which the presence of Vpr (not defined) protein in the sample is detected. Also included are a kit for use in the above detecting method containing a cell and a pigment, and a method for screening a compound promoting or inhibiting the intake of a substance having a notecular weight (M.W.) of 300 to 3000 in which the promotion or the inhibition of intake of the substance by the presence of a test compound is used as the index in the intake of the substance to the cell by a freatment using a sample containing Vpr protein. The method is used for the causative agent of acquired immunodeficiency virus (e.g. Human immunodeficiency virus (e.g. Human immunodeficiency virus (as a sample. The present sequence represents HIV-1 Vpr. (Updated on 29-AUG-2003 to standardise OS field)
isolates. The sequences shown include the near full-length coding sequences from each isolate, and the env, pol, vif, vpr, vpu, gag, tat, rev and nef proteins. These can be used to detect the presence of HIV-1 in a sample and to produce antibodies against non-subtype B HIV-1 virus. These antibodies can be used in vaccines to prevent and treat HIV infection. (Updated on 12-SEP-2003 to standardise OS field)
                                                                                                                                                                                              Gaps
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                                                                                                                                                  97.3%; Score 255; DB 3; Length 96; llarity 95.7%; Pred. No. 5.3e-25; Conservative 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV-1; acquired immunodeficiency syndrome; AIDS; Vpr.
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                                                                                                                                                                                                                                                                                                                            AAU80187 standard; protein; 96
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(first entry)
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(ORIY ) ORIENTAL YEAST
                                                                                                                                              Query Match
Best Local Similarity
Matches 45; Conserv
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                                                                                                                   Sequence 96 AA;
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15-JUL-2002
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DB 5; Length 96;

96.2%; Score 252;

Sequence 96 AA;

Query Match

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                                               47
 97.9%; Pred. No. 1.3e-24;
tive 0; Mismatches 1; Indels
                                                          1 MEQAPEDOGPOREPYNEWTLELLEBLKSEAVRHFPRIWLHULGQHIY
                                                                                                              Search completed: October 18, 2004, 18:45:32 Job time : 63.6875 secs
Best Local Similarity 97.9%
Matches 46; Conservative
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Sequence 15, Appli
Sequence 1, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 1, Appli
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113.688 Million cell updates/sec
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                                                                                                                                                  October 18, 2004, 18:42:45; Search time 27.4167 Seconds
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Sequence 15,
Sequence 15,
Sequence 11,
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262
1 MEQAPEDQGPQREPYNEWTL.....SEAVRHFPRIWLHNLGQHIY
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1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Listing first 45 summaries
                                                                                               OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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No.
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PCT-US96-11445-9 US-09-055-075C-10 US-09-919-124-10 US-09-91124-12 US-09-91124-12 US-08-1124-10 US-08-484-905-56 US-08-484-905-56 US-08-481-965-56 US-08-481-965-56 US-08-481-965-56 US-08-481-965-56 US-08-170-456 PCT-US94-02191-5 PCT-US94-02191-6 US-09-170-767-60286 US-09-170-767-60286 US-09-270-767-60286 US-09-270-767-60286 US-08-459-065-3		-19 (44073) (544073) (644073)		ULT 2 109-718-096-19 109-718-096-19 109-718-096-19 109-718-096-19 109-718-096-19 109-718-096-19-19-19-19-19-19-19-19-19-19-19-19-19-
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105 177 177 177 177 178 178 178 178 178 178		tion US/09309 -Pette-Instit Retroviral h 489 489 1999-05-11 NUMBER: US/0 1999-05-11 NUMBER: DE 13 1998-11-26 S: 24 Ver. 2.0	100 larity 100 Conservative APEDGGPQREPYI	1-096-19 10. Application US/097: No. 6589763 No. 6589763 No. 6589763 No. 6589763 No. FINCRMATION: NOT INVENTION: NOT INVENTION: NOT INVENTION: NOT INVENTION: NUMBER: US, APPLICATION NUMBER: DE; TILING DATE: 1998-11-25 APPLICATION NUMBER: US, FILING DATE: 1999-05-11 FILING DATE: 1999-05-11 FILING DATE: 1999-05-11
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		App. App. App. App. App. App. App. App.	ch 1 Similarity 47; Conserv 1 MEQAPEDGGE	-19 (Apple September 19 OVONA OVONA ENCE ENCE PLICA ICAT ICAT ICAT ICAT ICAT ICAT ICAT ICAT
103 900 900 900 900 900 900 900 900 900 9		ULT 1 19-309-572-19 equence 19, Applica equence 19, Applica ENERAL INFORMATION RPILE OF INVENTION FILLE REFERENCE: PS CURRENT APPLICATION CURRENT FILING DATI EARLIER FILING DATI EARLIER PPLICATION EARLIER PPLICATION EARLIER PLILNG DATI EARLIER PILLNG DATI EARLIER PLILNG DATI EARLIER PLILNG DATI EARLIER PLILNG DATI EARLIER PLILNG DATI CATURE IN O 19 ILENGTH: 96 TYPE: PRT TYPE: PRT ORGANISM: Human in O	al s al s 474	8-096-19 ce 19, Applicat. No. 6589763 L INFORMATION: CANT: VON LAEF CANT: VON LAE
		11 1 9-109-5 quence tent No NERAL I ITLE OF ILLE OF ILLE RE URERNT ARLIER ARLIER UMBER O OF UNDER UMBER O OF THARE UMBER O OF THARE UMBER O OF THARE O THARE	Loc	ULT 2 09-718-09 equence 1 atent No. atent No. APPLICANT TITLE OF TITE REFE CURRENT A FRIOR PRIOR APP
80000000000000000000000000000000000000		RESULT 1 Sequence 19, Sequence 19, Patent No. 6, GENERLI INFO APPLICANT: 1 TITLE OF INF TITLE REFERE CURRENT APPL CURRENT APPL CURRENT FIL. EARLIER PLIL EARLIER PLIL SACTUMENT PLIL CONTROL OF SI SOUTUMENT PLIL SACTUMENT PLIL CONTROL OF SI SEQ ID NO 19 LENGTH: 96 TYPE: PRT CORGANISM: PRT COR	עמט	RESULT 2 Sequence 19, Applica Sequence 19, Applica Patent No. 6589763 GENERAL INFORMATION: TITLE OF INVENTION: FILE REFERENCE: 35 CURRENT APPLICATION CURRENT FILING DATE PRIOR APPLICATION N PRIOR FILING DATE: NUMBER OF SEQ ID NO SOFTWARE: SEQ ID NO 19
		RESULT 1 US-09-309-572-19 Sequence 19, Application US/09309; Patent No. 6440730 GENERAL INFORMATION: APPLICANT: Heinrich-Pette-Institution TILE OF INVENTION: Retroviral hyperine REFERENCE: P50489 CURRENT FILING DATE: 1999-05-11 EARLIER PILING DATE: 1999-11-26 NUMBER OF SEQ ID NOS: 24 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 19 LENGTH: 96 TYPE: PRT ORGANISM: Human immunodeficiency PEATURE: COTHER INFORMATION: VPr protein US-09-309-572-19	2 6	8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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APPLICANT:
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                                                                                                                                                                                                                                                                                                                                     Sequence 15, Application US/08704856C

Patent No. 642832

GENERAL INFORMATION:
APPLICANT: Koprowski, Hilary
APPLICANT: Yusibov, Vidadi
APPLICANT: Modelski, Anna
APPLICANT: Modelska, Anna
TITLE OF INVENTION: Coat Proteins
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSE: Allan H. Fried & Associates
STREET: 1525 Locust Street, 15th Floor
COUNTRY: Dennsylvania
COUNTRY: USA
                                                                                                                                                                                                               1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                                                                                                                                                                                                                      Query Match 100.0%; Score 262; DB 4; Length 96; Best Local Similarity 100.0%; Pred. No. 1.8e-27; Matches 47; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
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Pred. No. 3.9e-26;
2; Mismatches 0; Indels
            TYPE: PRT
ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATURE SISTEM: WORDERFECT CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/704,856C PILING DATE: 28-Aug-1996 CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Fried, Allan H.
REGISTRALION NUMBER: 31,253
REFERENCE/DOCKET NUMBER: T19-007
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
US-09-242-881-15
Sequence 15, Application US/09242881
Patent No. 6448070
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS-DOS
                                             FEATURE:
CTHER INFORMATION: vpr protein
US-09-718-096-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (215) 732-7090
TELEFAX: (215) 732-7090
INFORMATION FOR SEQ ID NO: 15:
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Best Local Similarity 95.7%;
Matches 45; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: US ZIP: 19102
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US-08-704-856C-15
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TITLE OF INVENTION: Polypetides Fused with Plant Virus Coat Proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DELIVERY OF TITLE OF INVENTION: A MOLECULE INTO A CELL FILE OF INVENTION: A MOLECULE INTO A CELL FILE OF INVENTION: A MOLECULE INTO A CELL CURRENT APPLICATION NUMBER: US/09/839,329
CURRENT FILING DATE: 2001-04-20
PRIOR FILING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-23
PRIOR FILING DATE: 2001-02-09
NUMBER: OF SEQ ID NOS: 5
SOFTWARE: FASTERO for Windows Version 4.0
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Pred. No. 3.9e-26;
2; Mismatches 0; Indels
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                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Allan H. Fried & Associates
STREET: 1255 Locust Street, 15th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IEMP CC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: Corel Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/242,881
FILING DATE: 25-Feb-1999
CLASSIFICATION NUMBER: 08/704,856
FILING DATE: clnknown>
PRIOR APPLICATION NUMBER: 08/704,856
FILING DATE: clnknown>
ATTORNEY/AGENT INFORMATION:
NAME: Fried, Allan H.
REGISTRATION NUMBER: 31,253
REFERENCE/DOCKET NUMBER: 31,253
TELECOMMUTICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/09839329
Patent No. 6664040
GENERAL INFORMATION:
APPLICANT: Michael P. Sherman
APPLICANT: Warner C. Greene
APPLICANT: Carlos M.C. de No. 66640400hna
APPLICANT: Ulrich Schubert
APPLICANT: Peter Henklein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HYPOTHETICAL: N
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
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                                                                                                                                                                                                                                                                                               ZIP: 19102
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk
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                                                                                                                                                                                                                                                    STATE: Pennsylvania
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
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1 Similarity 95.7%;
45; Conservative ;
                                                                                                                                 NUMBER OF SEQUENCES: 16
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Best Local Similarity
Matches 45; Conserva
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Query Match
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                                                                                  OTHER INFORMATION: Synthetic peptide of regulatory virus proteins R OTHER INFORMATION: ('Opr') of human immunodeficiency virus type 1 OCHER INFORMATION: (HIV-1) US-09-839-329-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: COHEN, Eric A.
APPLICANT: BERGERON, Dominique
APPLICANT: CHECROUNE, Florent
APPLICANT: TAO, Xiao-Jian
APPLICANT: YAO, Xiao-Jian
APPLICANT: PIGNAC-KOBINGER, Gary
TITLE OF INVENTION: BROTEIN TARGETING INTO HIV VIRIONS
TITLE OF INVENTION: BASED ON HIV-1 VPR FUSION MOLECULES
NUMBER OF SEQUENCES: S
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
ADDRESSEE: KLAUBER & JACKSON
STREET: Continental Plaza, 411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                       1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRITLHNLGQHIY 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
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                                                                                                                                                                                                      Length 96;
                                                                                                                                                                                                                                                                                             1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: RC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/301,915
FILING DATE:
                                                                                                                                                                                                 Query Match 95.0%; Score 249; DB 4; Best Local Similarity 97.9%; Pred. No. 9.7e-26; Matches 46; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4, Application US/08301915
Patent No. 5861161
GENERAL INFORMATION:
APPLICANT: COHEN, ETIC A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 536
ATTORNEY/AGENT INPORMATION:
NAME: JACKSON, David A.
REGISTRATION NUMBER: 26,742
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEPHONE: 201-343-1684
                     TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 72 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HYPOTHETICAL: NO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Hackensack
STATE: N.J.
COUNTRY: U.S.A.
ZIP: 07601
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
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LENGTH: 96
                                                               FEATURE:
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                                                                                            APPLICANT: COHEN, Eric A.
APPLICANT: BERGERON, Dominique
APPLICANT: CHEKCHOUNE, Florent
APPLICANT: YAO, Xiao-Jian
APPLICANT: YAO, Xiao-Jian
APPLICANT: PIGNAC-ROBINGER, Gary
ITILE OF INVENTION: PROFIN TARGETING INTO HIV VIRIONS BASED
ITILE OF INVENTION: ON HIV-1 VPR FUSION MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MEQAPEDOGPOREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
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APPLICANT: CHECROUNE, Florent
APPLICANT: YAO, Xiao-Jian
APPLICANT: PIGNAC-KOBINGEN, Gary
TITLE OF INVENTION: PROFEIN TARGETING INTO HIV VIRIONS
TITLE OF INVENTION: BASED ON HIV-I VPR FUSION MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: Floppy disk
COMPUTER: The PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/524,694A
FILING DATE: September 7, 1995
CLASSIFICATION: 514
ATTORNEY/AGRAT
                                                                                                                                                                                                                    TITLE OF INVENTION: PROTEIN TARGETING INTO HIV VIRITILE OF INVENTION: ON HIV-1 VPR FUSION MOLECULES NUMBER OF SEQUENCES: 5 CORRESPONDENCE ADDRESS: ADDRESSE: ADDRESSE: ADDRESSE: LAUBER & JACKSON STREET: Continental Plaza, 411 Hackensack Avenue CITY: Hackensack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: KLAUBER & JACKSON
STREET: Continental Plaza, 411 Hackensack Avenue
CITY: Hackensack
STATE: N.J.
                  Sequence 4, Application US/08524694A
Patent No. 6043081
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4, Application US/09454156A
Patent No. 6468539
GENERAL INFORMATION:
APPLICANT: COHEN, Eric A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY AGENT INFORMATION:
NAME: JACKSON David A.
REGISTRATION UNDRER: 26,742
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-580
TELER: 133521
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 93.6
Matches 44; Conservative
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STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: U.S.A.
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US-09-454-156A-4
IS-08-524-694A-4
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us-08-301-915-1

Sequence 1, Application US/08301915

Patent No. 5861616

Better No. 5861616

GENERAL INFORMATION:

APPLICANT: CHEN, Eric A.

APPLICANT: CHENGERON, Dominique

APPLICANT: CHENGERON, Dominique

APPLICANT: CHENGERON, Dominique

APPLICANT: YAO, Xiao-Jian

APPLICANT: YAO, Xiao-Jian

APPLICANT: YAO, Xiao-Jian

TITLE OF INVENTION: PROTEIN TARGETING INTO HIV VIRIONS

TITLE OF INVENTION: BASED ON HIV-1 VPR FUSION MOLECULES

CORRESPONDENCE ADDRESS:

ADDRESSEE: KLAUBER & JACKSON

STREET: Continental Plaza, 411 Hackensack Avenue

CITY: Hackensack

STATE: N.J.

COMPTRY: U.S.A.

ZIP: OFFORT
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Patent No. 6043081
GENERAL INFORMATION:
APPLICANT: CCHEN, Eric A.
APPLICANT: CHECKOUNE, Florent
APPLICANT: CHECKOUNE, Florent
APPLICANT: PICHAC-KOBINERR, Gary
APPLICANT: PICHAC-KOBINERR, Gary
TITLE OF INVENTION: PROTEIN TARGETING INTO HIV VIRIONS BASED
TITLE OF INVENTION: ON HIV-1 VPR FUSION MOLECULES
          1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
                                                        Query Match 94.7%; Score 248; DB 2; Length 96; Best Local Similarity 93.6%; Pred. No. 1.38-25; Matches 44; Conservative 2; Mismatches 1; Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: TEM PC compatible
COMPUTER: TEM PC compatible
COMPUTER: TEM PC compatible
COMPUTER: TEM PC compatible
COMPUTER: TEM PC COMPUTER:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/301,915
FILING DATE:
CLASSIFICATION: 536
ATTORNEY ACENT INFORMATION:
NAME: JACKSON, David A.
REGISTRATION NUMBER: 26,742
TELEPHONE: 201-447-5806
TELEFRA: 201-447-5806
TELEFRA: 201-443-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 96 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: protein HYPOTHETICAL: NO
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US-08-524-694A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MEQAPEDOGPOREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/454,156A
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ORGANISM: Human imunodeficiency virus type 1
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CURRENT APPLICATION NUMBER: US/09/124,900
CURRENT FILING DATE: 1998-07-30
PRIOR APPLICATION NUMBER: PCT/EP95/01481
PRIOR FILING DATE: 1959-04-19
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                    APPLICATION.

FILING DATE:
ATTORNEY/AGENT INFORMATION.
NAME: JACKSON, David A.
REGISTRATION NUMBER: 26,742
TELEPHONE: 201-487-5800
TELEPAX: 201-343-1684
TELEPAX: 133521
TELEPAX: 133521
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 72 amino acids
TYPE: mino acids

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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/301,915
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Patent No. 6268484
GENERAL INFORMATION:
APPLICANT: KATINGER, Hermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HIV-Vaccines
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 93.6
Matches 44; Conservative
                                                                                                                                                                                                                                                   FILING DATE:
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LENGTH: 78
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE-INSERM
PAPPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
APPLICANT: ASSISTANCE PUBLIQUE-HOPITAUX DE PARIS
APPLICANT: MAUCLERE, PHilippe
APPLICANT: LOUSERRY-AAARA, Iblissam
APPLICANT: SARAGOSTI, Sentob
APPLICANT: BARRE-SINOUSSI, Francoise
TILLE OF INVENTION: NON-M NON-O HIV STRAINS, FRAGMENTS AND APPLICATIONS.
FILE REFERENCE: 5980122
CURRENT FILING DATE: 1999-08-27
CURRENT FILING DATE: 1999-08-27
FRIOR FILING DATE: 1996-12-09
NUMBER OF SEQ ID NOS: 98
SOFTWARE: PALENTIN VET. 2.1
SEQ ID NO 10
LENGTH: 95
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                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 94.7%; Score 248; DB 4; Length 96; Best Local Similarity 93.6%; Pred. No. 1.3e-25; Matches 44; Conservative 2; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: Human immunodeficiency virus type 1
US-09-319-588C-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Delaporte, Eric
Peeters, Martine
Saman, Eric
Vanden Haesevelde, Marlen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 116, Application US/09462917A ; Patent No. 6511801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 10, Application US/09319588C Patent No. 6509018
APPLICATION NUMBER: 08/301,915
                                                    ATTOKNEY AGENT INFORMATION.
NAME: JACKSON David A. REGISTRATION NUMBER: 26,742
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEFAX: 201-343-1684
TELEX: 133521
INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
LENGTH: 96 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                     ATTORNEY/AGENT INFORMATION: NAME: JACKSON. David A
                                                                                                                                                                                                                                                                                                                  h MOLECULE TYPE: protein
h HYPOTHETICAL: NO
US-09-454-156A-1
                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
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APPLICANT:
APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 248; DB 3; Length 96;
Pred. No. 1.3e-25;
2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SOFTWARE: PAPLICATION DATA:
APPLICATION NUMBER: US/08/524,694A
FILING DATE: September 7, 1995
CLASSIFICATION:
NAME: JACKSON, DAVIG A.
REGISTRATION NUMBER: 26,742
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 07601

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: The PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAETENTION DATA:
APPLICATION NUMBER: US/09/454,156A
FILING DATE:
CLASS!FICATION:
PRIOR APPLICATION DATA:
                 CORRESPONDENCE ADDRESS:
ADDRESSEE: KLAUBER & JACKSON
STREET: Continental Plaza, 411 Hackensack Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Continental Plaza, 411 Hackensack Avenue
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Patent No. 6468539
GENERAL INFORMATION:
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Best Local Similarity 93.6%;
Matches 44; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: 1 SEQUENCE CHARACTERISTICS: LENGTH: 96 aming
                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE: 201-487-5800
TELEFAX: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: protein HYPOTHETICAL: NO
  NUMBER OF SEQUENCES:
                                                           STREET: Continent
CITY: Hackensack
STATE: N.J.
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                                                                                                         STATE: N.J.
COUNTRY: U.S.A.
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ZIP: 07601
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STATE: N.J.
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US-09-454-156A-1
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| Refert No. 6511801
| GENERAL INFORMATION:
| APPLICANT: Delaporte, Eric
| APPLICANT: Saman, Eric
| APPLICANT: Saman, Eric
| APPLICANT: Vanden Hessevelde, Marlen
| TITLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof
| TITLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof
| TUTLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof
| TUTLE OF INVENTION: HIV-1 Group O Antigens
| TUTLE OF SEQ ID NOS: HIV-1 GROUP O ANTIGENS
| TUTLE OF SEQ ID NOS: HIV-1 GROUP O ANTIGENS
| TUTLE OF SEQ ID NOS: HIV-1 GROUP O ANTIGENS
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TITLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof FILE REFERENCE: INNS:014 11362.0014.NPUS00
CURRENT APPLICATION NUMBER: US/09/462,917A
CURRENT FILING DATE: 2000-04-03.PCT/EP98/04522
PRIOR APPLICATION NUMBER: PCT/EP98/04522
NUMBER OF SEQ ID NOS: 152
SOFTWARE: Patentin version 3.0
LENGTH: 100
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; TYPE: PRT
; ORGANISM: Human
US-09-462-917A-115
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; ORGANISM: Human
US-09-462-917A-116
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US-09-462-917A-115
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Search completed: October 18, 2004, 18:49:22 Job time: 28.4167 secs

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Sequence 1, Appli
Sequence 15, Appl
Sequence 284, App
Sequence 276, App
Sequence 264, App
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Sequence 266, App
Sequence 282, App
Sequence 283, App
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Sequence 1475, Ap
Sequence 258, App
Sequence 259, App
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Sequence 1, Appli
                                                                                                                                                                     (without alignments)
178.383 Million cell updates/sec
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                                                                                                                                          October 18, 2004, 18:43:30 ; Search time 85.1875 Seconds
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1 MEQAPEDQGPQREPYNEWTL.....SEAVRHFPRIWLHNLGQHIY
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GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
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US-10-190-435-284
US-10-190-435-276
US-10-190-435-264
US-10-190-435-266
US-10-190-435-282
US-10-190-435-282
US-10-296-734-4
US-10-296-734-1475
US-10-296-734-1475
US-10-190-435-258
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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                                                                                            OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Match Length DB
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
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                                                                                                                                            Run on:
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ednence	Sequence 11, Appl Sequence 267, App Sequence 1477, Ap Sequence 270, App Sequence 271, App Sequence 280, App Sequence 63, Appl Sequence 281, App Sequence 216, App Sequence 272, App
10-190 10-301 10-301 10-190 10	US-10-325-468-11 US-10-190-435-27 US-10-190-435-270 US-10-190-435-270 US-10-190-435-281 US-10-371-980-63 US-10-371-980-63 US-10-320-786-116 US-10-190-435-272 US-10-320-786-115
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ALIGNMENTS

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Sequence 272, Application US/10059261
| Sequence 272, Application US/10059261
| Publication No. US20030077826A1
| GENERAL INFORMATION:
| APPLICANT: BDELWAN, LENA
| APPLICANT: BACOTOT, ETIENNE DANIEL FRANCOIS
| APPLICANT: GRIAND, JEAN-PAUL
| TITLE OF INVENTION: CHIMERIC MALECULES CONTAINING A MODULE ABLE TO TARGET
| TITLE OF INVENTION: SPECIFIC CELLS AND A MODULE REGULATING THE APPTOCENIC
| TITLE OF INVENTION: PUPPO|
| FILE REFERENCE: 03495.0216
| CURRENT FILING DATE: 2002-08-29
| PRIOR APPLICATION NUMBER: 60/265,594
| WUMBER OF SEQ ID NOS: 325
| SOFTWARE: PALEATIN Ver. 2.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Human immunodeficiency virus type 1 US-10-059-261-272
JS-10-059-261-272
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LENGTH: 96
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RESULT 2 US-09-839-329-1 ; Sequence 1, Application US/09839329

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APPLICANT: LIAM, YING

APPLICANT: BIGALBRECHT, Susan

APPLICANT: BRGELBRECHT, Susan

APPLICANT: VAN RENBBURG, Estrelita J.

ITILE OF INVENTION: POLYMUCLECTIDES ENCODING ANTIGENIC HIV TYPE C.

ITILE OF INVENTION: POLYMETION COLYPETIDES, POLYPETIDES AND USES THEREOF

CURRENT APPLICATION NUMBER: US/10/190,435

CURRENT PILING DATE: 2002-12-30

NUMBER OF SEQ ID NOS: 319

SOFTWARE: Patentin Ver. 2.0

LENGTH: 96

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description of Artificial Sequence: Vpr 92BR025
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Publication No. US20030143248A1
GENERAL INFORMATION:
APPLICANT: BARNETT, Sugan W.
APPLICANT: LIAN, Ying
APPLICANT: BARNETT, Sugan
APPLICANT: WAN RENSENER, BELFALIGANT: TIAN, YING
APPLICANT: WAN RENSENERG, ESTRELLIA J.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING ANTIGENIC HIV TYPE C
                                                                                                                                                                                                                                                                                                                                                                                                                      OTHER INFORMATION: Description of Artificial Sequence: Vpr HXB2
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Pred. No. 3.4e-22;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 94.7%; Score 248; DB 14; Best Local Similarity 93.6%; Pred, No. 1.1e-22; Matches 44; Conservative 2; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Artificial Sequence
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Local Similarity 93.6%;
les 44; Conservative C
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: Synthetic peptide of regulatory virus proteins; OTHER INFORMATION: (Vpr.) of human immunodeficiency virus type 1 US-09-839-329-1
                                                                                                          APPLICANT: Michael P. Sherman
APPLICANT: Marner C. Greene
APPLICANT: Marner C. Greene
APPLICANT: Garlos M.C. de No. 66640400hna
APPLICANT: Olich Schubert
APPLICANT: Peter Henklein
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DELIVERY OF
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DELIVERY OF
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DELIVERY OF
TITLE OF INTENTION: A MOLECULE INTO A CELL
FILE REFERENCE: G&C 30448.91-US-U2
CURRENT FILING DATE: 2001-04-20
FRIOR APPLICATION NUMBER: 60/266,610
FRIOR APPLICATION NUMBER: 60/266,610
FRIOR APPLICATION NUMBER: 60/266,10
FRIOR FILING DATE: 2001-02-09
FRIOR FILING DATE: 2001-02-09
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
ERWINGH: 96
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94.7%; Score 248; DB 14; Length 78; 93.6%; Pred. No. 8.6e-23; Live 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: WASHER, Bruce
TITLE OF INVENTION: THERAPEUTIC ANTI-HIV (vpr) COMPOUNDS
FILE REFERENCE: GZ 2111.00
CURRENT APPLICATION NUMBER: US/10/283,618
CURRENT APPLICATION NUMBER: 06/345,957
PRIOR APPLICATION NUMBER: 2002-10-29
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FASTES OF WINDOWS VERSION 4.0
SEQ ID NO 15
LENGTH: 78
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Human Immunodeficiency Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-10-283 618-15
Sequence 15, Application US/10283618
Publication No. US20030165517A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Nicolette, Charles A.
                                                                              US20020022027A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 93.6
Matches 44; Conservative
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Best Local Similarity
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US-10-190-435-284
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SOFTWARE: Patentin Ver. 2.0
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Publication No. US20030143248A1

GENERAL INFORMATION:

APPLICANT: UST MEGEDE, Jan

APPLICANT: LIAN, Ying

APPLICANT: LIAN, Ying

APPLICANT: UNRENEURY, Estrelita J.

TITLE OF INVENTION: POLYMECLEOTIDES ENCODING ANTIGENIC HIV TYPE C

TITLE OF INVENTION: POLYMECLEOTIDES, POLYPEPTIDES AND USES THEREOF

FILE REPERENCE: PP18133.003 / 2302-18133

CURRENT APPLICATION UMBER: US/10/190,435

CURRENT PILING DATE: 2002-12-30

NUMBER OF SEQ ID NOS: 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: LIAN, Ying
TITLE OF INVENTION: POLYNUCLECTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
FILE REFERENCE: PP18133.003 / 2302-18133
CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 265
LENGTH: 96
                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV018-7 US-10-190-435-264
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        POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MEQAPEDQGPQREPYNEWTLELLEELKQEAVRHFPRPWLHSLGQYIY 47
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91.6%; Score 240; DB 14; Length 96;
Best Local Similarity 91.5%; Pred. No. 1e-21;
Matches 43; Conservative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                              91.6%; Score 240; DB 14; Length 96; larity 91.5%; Pred. No. 1e-21; Conservative 2; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MEQAPEDOGPOREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
TITLE OF INVENTION: POLYPEPTIDES, POLYPEP FILE REFERENCE: PP18133.003 / 2302-18133 CURRENT APPLICATION NUMBER: US/10/190,435 CURRENT FILING DATE: 2002-12-30 NUMBER OF SEQ ID NOS: 319 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 265, Application US/10190435; Publication No. US20030143248A1
GENERAL INFORMATION: APPLICANT: ZUR MEGEDE, Jan
                                                                                                                                                                                                                    TYPE: PRT ORGANISM: Artificial Sequence
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Best Local Similarity
Matches 43; Conserva
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Sequence 282, Application US/10190435

Sequence 282, Application US/10190435

Sequence 282, Application US/10190435

Publication No. USGO030143248A1

APPLICANT: ENRENGEDE, Jan

APPLICANT: BARNETT, Susan W.

APPLICANT: ENGELBRECHT, Susan W.

APPLICANT: ENGELBRECHT, Susan W.

APPLICANT: WAN RENSBURG, Estrelita J.

APPLICANT: VAN RENSBURG, Estrelita J.

TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF

FILE REFERENCE: PP18133.003 / 2302-18133

CURRENT FILING DATE: 2002-12-30

NUMBER OF SEQ ID NOS: 319

SOFTWARE: PATENTIN VET. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Description of Artificial Sequence: Vpr 96BW12-10
US-10-190-435-282
                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV002-84 US-10-190-435-266
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APPLICANT: ZUR MEGEDE, Jan
APPLICANT: BARNETT, Suean W.
APPLICANT: LAN, YING
APPLICANT: ENGELBRECHT, Suean
APPLICANT: VAN RENSBURG, Betrelite J.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYNUCLEOTIDES AND USES THEREOF
TITLE REFERENCE: PP18133.003 / 2302-18133
CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
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                                                                                                                                                                                                                                    Query Match 91.6%; Score 240; DB 14; Length 96; Best Local Similarity 91.5%; Pred. No. 1e-21; Matches 43; Conservative 2; Mismatches 2; Indels
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Publication No. US20030143248A1
GENERAL INFORMATION:
                                                        TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
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SEQ ID NO 266
LENGTH: 96
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LENGTH: 96
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LENGTH: 96
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FEATURE:

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APPLICANT: LOCK MESCHE, Juan
APPLICANT: LIAM Ying
APPLICANT: VAN RENSBÜRG. Estrelita J.
TITLE OF INVENTION: POLYMUCIEOTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYMUCIEOTIDES, POLYMEPTIDES, POLYMEPTIONS, COLYMENT APPLICANTION NUMBER: US/10/190,435
CURRENT APPLICANTION NUMBER: US/10/190,435
NUMBER OF SEQ ID NOS: 319
SOCTWARR: Patentin Ver. 2.0
SEQ ID NO 258
LENGTH: 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV008-17
US-10-190-435-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91.2%; Score 239; DB 14; Length 96; larity 89.4%; Pred. No. 1.4e-21; Conservative 2; Mismatches 3; Indels
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                                                                                        Sequence 258, Application US/10190435
Publication No. US20030143248A1
GENERAL INFORMATION:
APPLICANT: ZUR MEGEDE, Jan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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Best Local Similarity
Matches 42; Conserval
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US-10-190-435-273
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; OTHER INFORMATION: Description of Artificial Sequence: Vpr C2220-Eth US-10-190-435-283
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                                                                                                                                                                                        Score 240; DB 14; Length 96;
Pred. No. 1e-21;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/10296734

Publication No. US20040054137A1

GENERAL INFORMATION:

APPLICANT: Thompson, Scott A

APPLICANT: Thompson, Scott A

TITLE OF INVENTION: Synthetic molecules and uses therefor
FILE REFERENCE: Savine

CURRENT APPLICATION NUMBER: US/10/296,734

FRIOR APPLICATION UNMBER: AV PQ7761/00

PRIOR PILING DATE: 2000-05-26

NUMBER OF SEQ ID NOS: 1507

SOFTHARE: Patentin Version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MEQAPEDOGPOREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY 47
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Publication No. US20040054137A1

GENERAL INFORMATION:

APPLICANT: Thompson, Scott A

APPLICANT: Thompson, Scott A

TITLE OF INVENTION: Synthetic molecules and uses therefor

TITLE OF INVENTION: Synthetic molecules and uses therefor

CURRENT APPLICATION NUMBER: US/10/296,734

CURRENT PELING DATE: 2003-08-04

PRIOR PEPLICATION NUMBER: AU PQ7761/00

PRIOR PILING DATE: 2000-05-26

NUMBER OF SEQ ID NOS: 1507

SOFTWARE: PatentIn version 3.2

SEQ ID NO 1475
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91.6%; Score 240; DB 15;
Best Local Similarity 91.5%; Pred. No. 1e-21;
Matches 43; Conservative 1; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Human immunodeficiency virus
                                                                        ch 91.6%;
1 Similarity 91.5%;
43; Conservative
                                                                                           Best Local Similarity
Matches 43: Conserv
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US-10-296-734-1475
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US-10-296-734-4
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LENGTH: 96
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Sequence 259, Application US/10190435
Sequence 259, Application US/10190435
Publication No. US20030143248A1
GENERAL INFORMATION:
APPLICANT: ZUR MEGEDE, Jan
APPLICANT: LIAN, YING
APPLICANT: ENGELBRECHT, Susan
APPLICANT: LIAN, YING
APPLICANT: WAN RENSURG, Betrelita J.
TITLE OF INVENTION: POLYMPETIDES, POLYPEPTIDES AND USES THEREOF
FILE REFERENCE: PP19133.003 / 2302-18133
CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 259
LENGTH: 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV008-1
US-10-190-435-259
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: SUR MESEDE, Jan
APPLICANT: BARNETY, Susan W.
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
TITLE OF INVENTION: POLYMUCLECTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYMUCLECTIDES, POLYPEPTIDES AND USES THEREOF
TITLE OF INVENTION: POLYMUCLECTIDES, POLYPEPTIDES AND USES THEREOF
TITLE OF INVENTION: POLYMUCLECTIDES, POLYPEPTIDES AND USES THEREOF
TITLE OF INVENTION: DOLYMUCLECTIDES, POLYPEPTIDES AND USES THEREOF
TITLE OF INVENTION: DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
CURRENT APPLICATION NORS: 319
SOCTWARE: PATENTIAL SEQUENCE
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
COTHER INFORMATION: DESCRIPTION of Artificial Sequence: Vpr TV012-4
US-10-190-435-273
QUERY MATCH
BEST LOCAL SIMILARITY
BOATOM STATEMENT STATEMEN
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Search completed: October 18, 2004, 18:52:22 Job time: 85.1875 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Run on:

October 18, 2004, 18:38:31; Search time 16.6458 Seconds (without alignments) 271.671 Million cell updates/sec

US-09-913-927D-2 262 1 MEQAPEDQGPQREPYNEWTL.....SEAVRHFPRIWLHNLGQHIY Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	vpr protein - huma						O)	1	protein -	1	protein -									protein		vpu protein - simi	protein -	transposase (clone	gag polyprotein -		gag protein - bovi	blastula butanol-e	preprotein translo
SUMMARIES	ID	\$54380	T09383	T09444	T01670	D44001	ASLJSC	S03067	ASLJR3	ASLJRS	807991	T11563	S28083	S53095	508439	ASLJCY	ASLJSY	ASLJR2	S12156	ASLJGR	846351	AI0275	ASLJX4	PIWL	836993	FOLJGA	FOLJGB	S29356	B60672	B64618
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de	Query	95.8	94.3	94.3	95.4	91.2		•	56.5	56.3		54.6	51.1	48.9	47.7	46.2	42.9	45.4	39.3	35.9		29.5	25.8	٠	24.2	23.3		23.3	23.1	23.1
	Score	251	247	247	242	239	215	154	ù	147.5	145	143	134	128	125	121	112.5	111	103	94	87	76.5	67.5	S	63.5	61	61	61	60.5	60.5
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60 59.5		59	28	28	28	58	28	28	57.5	57.5	57.5	57.5	57.5	57.5

ALIGNMENTS

RESULT 1 \$45480 **vpr procein - human immunodeficiency virus type 1 CiSpecies: human immunodeficiency virus type 1, HIV-1 CiSpecies: Total sequence_revision 01-Sep-1995 #text_change 09-Jul-2004 CiDate: 15-Jul-1995 #sequence_revision 01-Sep-1995 #text_change 09-Jul-2004 RiTheodore, T.; Buckler-White, A.J. AiReference number: S54377 AiReference number: S54387 AiReference number: S54387 AiReference number: genomic RNA AiReference of genomic RNA AiReference of CiDate Indianary AiReference of CiDate Indianary AiReference of CiDate Indianary AiReference of CiDate Indianary	A;Cross-references: UNIPROT:P12519; EMBL:M22639; NID:g329377; PIDN:AAA4536E C;Superfamily: AIDS vpr protein	0; Gaps
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rue on Jul	EWB	Score 251; DB 2; Length 9 Pred. No. 1.5e-23; 2; Mismatches 0; Indels
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RESULT 1 S54380 Cispecies: human immunodeficiency virus type 1 Cispecies: human immunodeficiency virus type 1 Cispecies: human immunodeficiency virus type 1, HIV-1 Cispecies: human immunodeficiency virus type 1, HIV-1 Cispecies: 15-Jul-1995 #sequence_revision 01-Sep-1995 #tc CiAccession: S543180 A;Recession: S54380 A;Accession: S54380 A;Accession: S54380 A;Accession: S54380 A;Accession: S54380 A;Accession: Citype: genomic RNA A;Molccule type: genomic RNA A;Residues: 1-96 cfffes	A,Cross-references: UNIPROT:P12: C,Superfamily: AIDS vpr protein	Query Match 95.8%; Score 251; DB 2; Length 96; Best Local Similarity 95.7%; Pred. No. 1.5e-23; Matches 45; Conservative 2; Mismatches 0; Indels
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Best Local Similarity 91.5%; Pred. No. 4.7e-23;
Matches 43; Conservative 2; Mismatches 2; Indels

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1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHPPRIWLHNLGQHIY 47

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Gaps

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Length 97;

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A,Status: nucleic acid sequence not shown; translation not shown
A,Molecule type: DNA
A,Residues: 1-96 <HUB>
A,Cross-references: UNIPROT:P17287; EMBL:X52154; NID:g58866; PIDN:CAA36403.1; PID:g58870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene R protein - human T-cell lymphotropic virus type 4
C;Species: human T-cell lymphotropic virus type 4, HTLV-4
C;Date: 21-Nov-1993 #sequence_revision 26-May-1995 #text_change 09-Jul-2004
C;Accession: 803067
R;Hahn, B.H.; Kong, L.I.; Lee, S.W.; Kumar, P.; Taylor, M.E.; Arya, S.K.; Shaw, G.M. Nature 300, 184-186, 11987
A;Title: Relation of HTLV-4 to simian and human immunodeficiency-associated viruses. A;Reference number: 803067
                                                                                                                                                                                                                                                                                                                                                                                                                                                          N'Alternate names: orf-R protein
C'Species: simian immunodeficiency virus SIVcpz
A;Note: host Pan troglodytes (chimpanzee)
C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Accession: $09986
R;Huet, T.; Cheynier, R.; Meyerhans, A.; Roelants, G.; Wain-Hobson, S.
Muture 345, 356-359, 1990
A;Title: Genetic organization of a chimpanzee lentivirus related to HIV-1.
A;Reference number: $09983; WUID:90259077; PMID:2188136
                                                                                                                                                                                                                                                              1 MEQAPEDQGPQREPHNEWILELLEELKREAVRHFPRPWLHGLGQHIY 47
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Pred. No. 3.7e-19;
1; Mismatches 7; Indels
                                                                                                                Score 239; DB 1; Length 97
Pred. No. 4.5e-22;
1; Mismatches 3; Indele
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                                                                                                                                                                                                                                                                                                                                                                                                                                     vpr protein - simian immunodeficiency virus SIVcpz
A;Gene: vpr
C;Superfamily: AIDS vpr protein
C;Keywords: AIDS; immunodeficiency
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C,Superfamily: AIDS vpr protein
C,Keywords: AIDS; immunodeficiency
                                                                                                             Query Match
Best Local Similarity 91.5%;
Matches 43; Conservative
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Best Local Similarity 83.0%;
Matches 39; Conservative
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'Ypr protein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 19-Feb-1999 #sequence_revision 19-Feb-1999 #text_change 09-Jul-2004
C;Accession: T01670
R;Alizon, M.; Wain-Hobson, S.; Gluckman, J.C.; Sonigo, P.
Cell 46, 63-74, 1986
A;Title: Genetic variability of the AIDS virus: Nucleotide sequence analysis of two isol
A;Reference number: Z14389; MUID:86245056; PMID:2424612
A;Recession: T01670
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-96 AALI>
A;Residues: 1-96 AALI>
A;Coss-references: UNIPROT:P05955; EMBL:K03456; NID:g60228; PIDN:CAA28014.1; PID:g60232
C;Superfamily: AIDS vpr protein
                                                                                                                                              C;Species: human immunodelice...,
C;Species: human immunodelice...,
C;Species: human immunodelice...,
C;Date: 16-Jul-1999 #teac.......,
C;Accession: T0944
R;Pang, S:, Vinters, H.V.; Akashi, T.; O'Brien, W.A.; Chen, I.S.; Koyanagi, Y.; Namazie,
Submitted to the EMBL Data Library, July 1996
A;Reference number: Z16673
A;Reference number: Z16673
A;Reference number: DA4
A;Residues: preliminary; translated from GB/EMBL/DDBJ
A;Residues: DA4
A;Residues: 1-96 < PAN>
A;Cross-references: UNIPROT:Q75757; EMBL:U63632; NID:g1465777; PID:g1465784
C;Genetics:
A;Gene: vpr
C;Superfamily: AIDS vpr protein
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A;Tille: Complete nucleotide sequence, genome organization, and biological properties of A;Reference number: A44001; MUID:93021387; PMID:1404605
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                                                                                                                         vpr protein - human immunodeficiency virus type 1 (strain JRFL)
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 16-Jul_1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004
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D44001
Ny Protein - human immunodeficiency virus type 1 (strain YU-2)
N/Alternate names: orf-R protein
C;Species: human immunodeficiency virus type 1, HIV-1
A;NOte: host Homo sapiens (man)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1999 #text_change 09-Jul-2004
C;Accession: D44001
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Pred. No. 4.7e-23;
4; Mismatches 0; Indels
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A;Molecule type: DNA
Residues typ? <LIY>
A;Cross-references: UNIPROT:P35967; GB:M93258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 94.3%;
1 Similarity 91.5%;
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Matches 43; Conserv
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Gaps

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A;Cross-references: UNIPROT:085605; EMBL:X06391; NID:g61580; PIDN:CAA29689.1; PID:g61582
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, December 1987
C;Superfamily: AIDS vpr protein
                                                                                                                                                                                                                                                                                                        7
A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA A;Residues: 1-97 <HAH>
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                            Query Match 58.8%; Score 154; DB 2; Length 97; Best Local Similarity 61.7%; Pred. No. 1e-11; Matches 29; Conservative 10; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                     2 EQAPEDOGPOREPYNEWILELLEELKSEAVRHF-PRIWLHNLGQHIY
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A;Gene: vpr C;Superfamily: AIDS vpr protein C;Keywords: AIDS; immunodeficiency

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C; Accession: T11563

**Hirsch, V.M.; Adger-Johnson, D.; Cambell, B.; Goldstein, S.; Brown, C.; Elkins, W.R.; N. V. Virol. 71, 1608-1620, 1997

**A; Title: A molecularly cloned, pathogenic, neutralization-resistant simian immunodeficier A; Reference number: Z17285; MUID:97151152; PMID:8995688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Cross-references: UNIPROT: P89157; EMBL: U72748; NID: 91695908; PIDN: AACS6562.1; PID: 91695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C.Species: simian immunodeficiency virus
C.Accession: S28083
R.Tsujimoto, H.; Hasegawa, A.; Maki, N.; Fukasawa, M.; Miura, T.; Speidel, S.; Cooper, R.
Nature 341, S39-S41, 1989
A.Title: Sequence of a novel simian immunodeficiency virus from a wild-caught African mar
A.Reference number: S28080; MUID:90015168; PMID:2797181
A.Accession: S28083
A.Status: nucleic acid sequence not shown; translation not shown
A.Status: 1.104 CTSU-
A.Accession: A.Specidus: T.104 CTSU-
A.Status: A.Specidus: T.104 CTSU-
A.Status: Molecule type: DNA
A.Residus: T.104 CTSU-
A.Cross-references: GB:M27470; EMBL:X15781; NID:9334683; PIDN:AAB49571.1; PID:9334689
A.Cross-references: GB:M27470; EMBL:X15781; NID:934683; DIDN:AAB49571.1; PID:9334689
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vpr protein - simian immunodeficiency virus SIVsm (strain E543)
C.Species: simian immunodeficiency virus SIVsm
A.Yariety: strain E543
C.Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                 Сарв
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                                                                                                                                           Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
54.6%; Score 143; DB 2; Length 10
Best Local Similarity 57.4%; Pred. No. 2.3e-10;
Matches 27; Conservative 11; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                           2 EQAPEDQGPOREPYNEWILELLEELKSEAVRHF-PRIWLHNLGOHIY
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Best Local Similarity 59.6%; Pred. No. 1.1e-10;
Matches 28; Conservative 10; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-101 <HIR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,Gene: vpr
C,Superfamily: AIDS vpr protein
C,Keywords: AIDS; immunodeficiency
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A<sub>i</sub>Gene: vpr
C;Superfamily: AIDS vpr protein
                                         A,Gene: vpr
C,Superfamily: AIDS vpr protein
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          C, Genetics:
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C;Species: simian immunodeficiency virus SIVagm

C;Species: simian immunodeficiency virus SIVagm

C;Species: simian immunodeficiency virus SIVagm

C;Accession: E26737

R;Hirsch, V; Riedel, N; Mullins, J.I.

A;Hirsch, V; Riedel, N; Mullins, J.I.

A;Hirsch, V; Riedel, N; Mullins, J.I.

A;Hitle: The genome organization of SILV-3 is similar to that of the AIDS virus except

A;Reference number: A26737; WUID:87187627; PMID:3646094
vpr protein - simian immunodeficiency virus (macaque isolate)
NyAlternate names: orf=R protein
Species: simian immunodeficiency virus, SIV
C;Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 16-Jul-1999
C;Accession: B28897
R;Chakrabarti, L.; Guyader, M.; Alizon, M.; Daniel, M.D.; Desrosiers, R.C.; Tiollais, Nature 328, 543-547, 1987
A;Title: Sequence of simian immunodeficiency virus from macaque and its relationship the A;Reference number: A28887; MUID:87287230; PMID:3649576
                                                                                                                                                                                                                                                                                                                                    A,Molecule type: DNA
A,Residues: 1-101 < CHA>
A,CTOSS-references: GB:Y00277; GB:M16403; NID:g61730; PIDN:CAA68383.1; PID:g61735
C,Genetics:
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S07991
Vpr protein - simian immunodeficiency virus SIVsm (isolate F236)
C;Species: simian immunodeficiency virus SIVsm (isolate F236)
C;Species: simian immunodeficiency virus SIVsm
A;Note: host Cercocebus torguatus atys (sooty mangabey)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004
C;Accession: S07991
R;Hisch, V.M.; Olmsted, R.A.; Murphey-Corb, M.; Purcell, R.H.; Johnson, P.R.
Nature 339, 389-392, 1989
A;Title: An African primate lentivirus (SIV(sm)) closely related to HIV-2.
A;Reference number: S04237; MUID:89262053; PMID:2786147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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56.5%; Score 148; DB 1; Length 101;

Best Local Similarity 59.6%; Pred. No. 5.7e-11;

Matches 28; Conservative 11; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Status: nucleic acid sequence not shown; translation not shown
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A; Cross-references: UNIPROT: P11265; GB: M19499; NID: 9334657

A; Molecule type: DNA A; Residues: 1-122 <HIR>

C, Genetics:

A,Gene: vpr C,Superfamily: AIDS vpr protein C,Keywords: AIDS; lmmunodeficiency

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A;Cross-references: UNIPROT:P12521; EMBL:X14307; NID:961741; PIDN:CAA32486.1; PID:961745 A;Note: this sequence was submitted to the EMBL Data Library, February 1989 A; Molecule type: genomic RNA A; Residues: 1-89 <HIR>

Accession: S07991

RESULT 13

us-09-913-927d-2.rpr

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C;Species: human immunodeficiency virus type 2 D205, HIV-2 D205
C;Species: human immunodeficiency virus type 2 D205, HIV-2 D205
C;Species: human immunodeficiency virus type 2 D205, HIV-2 D205
C;Species: human immunodeficiency virus type 2 D205, HIV-2 D205
C;Species: no S08439
R;Dietrich, U.; Adamski, M.; Kreutz, R.; Seipp, A.; Kuehnel, H.; Ruebsamen-Waigmann, H. A;Pille: A Heighly divergent HIV-2-related isolate.
A;Reference number: S08434; MUID:90081881; PMID:2594088
A;Fatus: nucleic acid sequence not shown; translation not shown
A;Status: nucleic acid sequence not shown; translation not shown
A;Status: nucleic acid sequence not shown; translation of shown
A;Status: nucleic acid sequence to the shown; translation of shown
A;Status: nucleic acid sequence to the shown; translation of shown
A;Status: nucleic acid sequence of the shown; translation of shown
A;Status: nucleic acid sequence to the shown; translation of shown
A;Status: nucleic acid sequence was submitted to the EMBL Data Library, Aug-1989
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
C;Superfamily: AIDS vpr protein
Vpr Protein - human immunodeficiency virus type 2
C;Species: human immunodeficiency virus type 2, HIV-2
C;Date: 08-Jul-1995 #sequence_revision 21-Jul-1995 #text_change 09-Jul-2004
C;Accession: 553095
R;Becker, M.; Zorr, B.; Becker, A.; Habermehl, K.O.
R;Becker, M.; Zorr, B.; Becker, A.; Habermehl, K.O.
A;Becker, M.; Zorr, B.; Becker, A;Bassalor, S33095
A;Reference number: 553091
A;Residues: preliminary
A;Residues: 1-105 <BEC>
A;Residues: 1-105 <BEC>
A;Cross-references: UNIPROT:Q76624; EMBL:Z48731; NID:g732718; PIDN:CAA88624.1; PID:g7327
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ASLUCY
Vpr protein - human immunodeficiency virus type 2 (isolate CAM2/Guinea-Bissau)
N/ALternate names: orf-R protein
C.Species: human immunodeficiency virus type 2, HIV-2
C.Species: human immunodeficiency virus type 2, HIV-2
C.Species: human immunodeficiency virus type 2, HIV-2
C.Species: 31-Mar-1992 #sequence revision 31-Mar-1992 #text_change 09-Jul-2004
R.Tristen, M., HILl, F.; Karpas, A.
J. Gen. Virol. 72, 721-724, 1991
A.Title: Nucleotide sequence of a Guinea-Bissau-derived human immunodeficiency virus typ
A.Accession: E38475, MUD:91170959; PMID:2005437
A.Molecule type: DNA
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A;Residues: 1-104 <TRI>
A;Cross-references: UNIPROT:P24111; GB:D00835; NID:g3153166; PIDN:BAA00713.1; PID:g22147
C;Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 EQAPEDQGPOREPYNEWTLELLEELKSEAVRHFPRIWLHNIGQHIY 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

Query Match
Best Local Similarity 55.3%; Pred. No. 3.6e-08;
Matches 26; Conservative 8; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
48.9%; Score 128; DB 2;
Best Local Similarity 52.2%; Pred. No. 1.6e-08;
Matches 24; Conservative 7; Mismatches 15,
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A,Gene: vpr
C,Superfamily: AIDS vpr protein
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Search completed: October 18, 2004, 18:48:20 Job time : 17.6458 secs

Q9e259 human immun Q9e264 human immun Q6e254 human immun G6e215 human immun G6e219 human immun Q69212 human immun Q79234 human immun Q79260 human immun Q79260 human immun Q79572 human immun Q36672 human immun Q36672 human immun Q36679 human immun

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                                                                                                                                                                                                                                                                                                                                                           Human immunodeficiency virus type 1 (New York-5 isolate) (HIV-1).
Viruses, Retroid viruses, Retroviridae, Lentivirus.
NCBI_TaxID=11698;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
Buckler C.E., Buckler-White A.J., Willey R.L., McCoy J.;
Submitted (JUN-1988) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MEQAPEDQGPQREPYNEWTLELLEELKSEAVRHFPRIWLHNLGQHIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58BC53573479D150 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 262; DB 1;
ilarity 100.0%; Pred. No. 1.2e-24;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                           01-0CT-1989 (Rel. 12, Created)
01-FEB-1996 (Rel. 3), Last sequence update)
01-CCT-2004 (Rel. 45, Last annotation update)
VPR protein (R ORF protein).
                                                                                                                                                                                                       ALIGNMENTS
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                                                                                                                                       0910B0
AAR24629
AAR24630
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Q9E259
Q9E262
Q9E264
Q6SZT5
Q6SZT1
Q6SZU1
Q6SZU1
Q6SZU2
Q79230
Q79230
Q79230
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MEDLINES-1268767; PubMed=11375060;
MEDLINES-21268767; PubMed=11375060;
Halani N., Wang B., Ge Y.C., Gharpure H., Hira S., Saksena N.K.;
"Changing epidemiology of HIV type I infections in India: evidence of subtype B introduction in Bombay from a common source.";
AIDS Res. Hum. Retroviruses 17:637-642(2001).
BMBL; AF316100; AALI288.1;
INTERPROSONO12; RetroV_VPR/X.
Pfam; PP00522; VPR; I.
PRINTS; PR00444; HIVVERVEX.
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MEDLINE=9832522; PubMed=9658150;
Yedavalli V.R., Chappey C., Ahmad N.;
"Maintenance of an intact human immunodeficiency virus type 1 vpr gene following mother-to-infant transmission.";
J. Virol. 72:6937-6943(1998).
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Pred. No. 2.9e-24;
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96 AA; 11446 MW; DB9552FEC3808241 CRC64;
         01-JUN-2003 (TrEMBLrel. 24, Last annotation update) Vpr protein.
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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97.9%; Pred. No. 1.7e-24;
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InterPro; IPR000012; Retrov_VpR/X.
Pfam; PF00522; VPR; 1.
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HSSP; P12520; 1DSJ.
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Halani N., Wang B., Ge Y.C., Gharpure H., Hira S., Saksena N.K.;
Halani N., Wang B., Ge Y.C., Gharpure H., Hira S., Saksena N.K.;
"Changing epidemiology of HIV type 1 infections in India: evidence of subtype B introduction in Bombay from a common source.";
AIDS Res. Hum. Retrovirues 17:637-642(2001).
EMBL; AF316101; AAK11289.1;
HSSP; P12520; 1DSJ.
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                                                                  Human îmmunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
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01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
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Pfam; PF00522; VPR; 1.
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Pfam; PF00522; VPR; 1.
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01-JUN-2001 (TrEMBLrel. 17,
01-JUN-2001 (TrEMBLrel. 17,
01-MAR-2004 (TrEMBLrel. 26,
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Matches 46; Conservative
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01-JUN-2003 (
VpR protein.
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SEQUENCE FROM N.A.
MEDILIBE-983.25.221, PubMed=9658150;
Yedavalli V.R., Chappey C., Ahmad N.;
"Maintenance of an intact human immunodeficiency virus type 1 vpr gene
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MEDLINE=9832522; PubMed=9658150;
Yedavalli V.R., Chappey C., Ahmad N.;
Yedavalli V.R., Chappey C., Ahmad N.;
Yedavalli V.R., Chappey C., Ahmad N.;

Yedavalli V.R., Chappey C., Ahmad N.;

Yodavalli V.R., Chappey C., Ahmad N.;

J. Ulzol. Of an intact human immunodeficiency virus type 1 vpr gene following mother-to-infant transmission.";

J. Virol. 72:6937-6943(1998).

EMBL, AR042917; AAC41083.1; -.

EMBL, PR042017; Retrov_VpR/X.

Pfam; PR00522; VPR, 1.

PRINTS; PR00444; HIVVPRVPX.
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96 AA; 11432 MW; DB954C0F2C808241 CRC64;
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96 AA; 11446 MW; DB9552FEC3808241 CRC64;
                Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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InterPro; IPR000012; RetroV VpR/X.
Pfam; PF00522; VPR; 1.
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01-OCT-2003 (Trimblie). 09, La
Vpr protein (Fragment).
Name=vpr;
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Yedavalli V.R., Chappey C., Ahmad N.;
"Maintenance of an intact human immunodeficiency virus type 1 vpr gene
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Yedavalli V.R., Chappey C., Ahmad N.;
"Maintenance of an intact human immunodeficiency virus type 1 vpr gene
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Pred. No. 2.9e-24;
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96 AA; 11416 MW; DB95484EC487F220 CRC64;
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                               Human İmmunodeficiency virus 1.
Viruses, Retroid viruses, Retroviridae, Lentivirus.
NCBI_TaxID=11676,
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01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Vpr protein (Fragment).
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
VCBI_TaxID=11676;
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J. Virol. 73:6937-6943(1998).
EMBL, AFV62913; AAC41080.1; -.
InterPro; IPR000012; Retrov_VpR/X.
Pfam; PF00522; VPR; 1.
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J. Virol. 72:6937-6943(1998).
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BMBL; AF042912; AAC41079.1; -.
InterPro; IPR000012; RetroV_VpK/X.
Pfam; PF00522; VPR; 1.
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Vpr protein (Fragment).
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Vpr protein (Fragment)
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SEQUENCE FROM N.A.

MEDLINE=9832522; PubMed=9658150;

WEDLINE=98325222; PubMed=9658150;

Vedavalli V.R., Chappey C., Ahmad N.;

Vedavalli V.R., Chappey C., Ahmad N.;

Maintenance of an intact human immunodeficiency virus type 1 vpr gene following mother-to-infant transmission.";

J. Virol. 72:6937-6943(1998).

BMBL; AF042921; AAC41087.1;

Ffam; PF00522; VPR; 1.

PRINTS; PR00444; HIVVPRVPX.
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Yedavalli V.R., Chappey C., Ahmad N.;
"Maintenance of an intext human immunodeficiency virus type 1 vpr gene following mother-to-infant transmission.";
J. Virol. 72:6937-6943(1998).
BMBL, AF042922; AAC41088.1; -.
InterPro; IPR000012; Retrov_VpR/X.
Pfam; PF00522; VpR; 1.
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96 AA; 11446 MW; DB9552FEC3808241 CRC64;
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(TrEMBLrel. 24, Last annotation update)
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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Best Local Similarity 97.57
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Vpr protein (Fragment).
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Yedavalli V.R., Chappey C., Ahmad N.;
Yedavalli V.R., Chappey C., Ahmad N.;
"Maintenance of an inteact human immunodeficiency virus type 1 vpr gene following mother-to-infant transmission.";
J. Virol. 72:6937-6943(1998).
EMBL; AF042919; AAC41085.1; -.
EMBL; PR006212; VPR; RetroV_VPR/X.
Pfam; PF00522; VPR; HIVVPRVPX.
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SEQUENCE FROM N.A.
MEDLINE-9833522; PubMed=9658150;
MEDLINE-9833522; PubMed=9658150;
Yedavalli V.R., Chappey C., Ahmad N.;
"Maintenance of an intact human immunodeficiency virus type 1 vpr gene following mother-to-infant transmission.";
O. Virol. 72:6937-6943(1998).
EMBL; AF042923; AAC41089.1; -.
InterPro; IPR060012; RetroV_VPR/X.
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Yedavalii V.R., Chappey C., Ahmad N.;
Yedavalii V.R., Chappey C., Ahmad N.;
"Maintenance of an intact human immunodeficiency virus type 1 vpr gene following mother-to-infant transmission.";
J. Virol. 72:6937-694(1998).
EMBL, PR042924; AAC41090.1; -.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	Aab10687 HIV-1 red		HIV	9 HIV-1	5 HIV-1			Aau80187 HIV-1 Vpr	HIV-1		6	Human	HIV-1	Native	_	Abr55491 Amino aci	Adp20078 Human imm	Aab69306 HIV-1 non	Adp81468 Lymphaden		Aar10175 Rap (R) p	æ	-	_	Aap81856 Sequence
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92.9	92.5 92.5	92.1	91.1	90.9	90.9	90.6	90.6	90.0	88.6	98.6	98.6	98.6	88.6	98.6	98.6	88.2
236	235 235	234	231.5	231	231	230	230	228.5	225	225	225	225	225	225	225	224
26	7 7 7 8 7 8	30	35	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

Regulatory virus protein R; Vpr; antiviral; gene therapy; pathogenicity; structural analysis; cell cycle arrest. HIV-1 regulatory virus protein R peptide sVpr48-96. AAB10687 standard; peptide; 49 AA Human immunodeficiency virus 1. 19-FEB-2000; 2000WO-DE000525. 99DE-01008752. 99DE-01008766. (first entry) WO200049038-A2. 19-FEB-1999; 19-FEB-1999; 19-JAN-2001 24-AUG-2000 Synthetic. AAB10687; RESULT 1 AAB10687

Wray V; Henklein P, (SCHU/) SCHUBERT U. (HENK/) HENKLEIN P. (WRAY/) WRAY V. Schubert U,

New synthetic peptides from the Vpr protein of human immune deficiency virus, useful e.g. for therapy and diagnosis, have good solubility in WPI; 2000-565367/52. water.

Claim 3.3; Page 5; 35pp; German.

This invention describes novel synthetic peptides (1) derived from the regulatory viral protein R (Vpr) of human immunodeficiency virus-1 (HIV-1) which have antiviral activity and can be used for gene therapy. (1) is used for therapeutic and/or diagnostic purposes, especially in biological assays, for development of serological tests or enzyme-linked immunosorbent assays (ELISA) (e.g. for detecting or quantifying vpr in blood), to raise specific antibodies and antisera (especially those reactive with specific epicopes), and as antiviral agents (1) can also be used in screening for potential vpr antagonists (i.e. compounds that

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modulate interaction of Vpr with cellular factors, transcription-
activating properties of Vpr, transport of Vpr and its incorporation into
viral particles, Vpr-induced cell cycle arrest, and cytocoxic and ion-
channel activities of Vpr). (I) is used to establish cell or animal
models for studying pathogenicity of Vpr, for structural analysis of Vpr
and its domains, for in vitro assembly of new vectors for gene therapy,
in vitro or in vivo, for complementing the function of Vpr-defect mutants
in cell cultures, and to reduce flexibility of Vpr induced by the N-
terminal domain. Synthetic (I), are soluble in water and can be
formulated as highly concentrated solutions (mmolar) without protein
aggregation, so are well suited to analysis by nuclear magnetic
resonance, X-ray or circular dichroism techniques. (I) adopt a folded
creviewe, have biological activity comparable to that of viral Vpr, and
can be produced, at high purity, on the milligram scale. This sequence
represents the synthetic HIV-1 derived Vpr peptide sVpr48-96 which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    used in the method of the invention
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Sequence 49 AA;

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                               Gaps
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                                                                              1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS 49
 Length 49;
                                                             1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
                               0; Indels
Score 254; DB 3;
Pred. No. 7e-30;
 ch 100.0%; Score 254; D
1 Similarity 100.0%; Pred. No. 7e-
49; Conservative 0; Mismatches
                  Local Similarity
   Query Match
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AAR48963 standard; protein; 96 AA.

(revised)
(first entry) 25-MAR-2003 12-SEP-1994 AAR48963;

HIV VPR.

HIV-1; HXB2; antisense; sequence inversion; antisense virus; infection; naturally occuring virus; NOV; translation; replication; infectivity; hepatitis B; HIV-2; SIV; flip-over PCR.

Synthetic.

WO9403596-A1

17-FEB-1994,

93WO-US007179 30-JUL-1993; 92US-00921104 30-JUL-1992;

(UYHA-) UNIV HAWAII.

Wang J; Hu W,

WPI; 1994-065685/08 N-PSDB; AAQ48962 New antisense viruses and anti:sense-ribozyme viruses - used for treating or preventing viral infections, partic. $\rm HIV-1$, $\rm HIV-2$ or $\rm SIV$ infection.

Disclosure; Page 111; 167pp; English.

This sequence represents the "perfect" VPR protein encoded by the PCR fragment of px-CS which encodeds the truncated gag gene and the "perfect" vpr gene. The CDNA fragment encoding this protein was used to produce the antisense virus of the invention. Antisense or truncated RNAs expressed by these viruses bind to the mRNAs expressed by the naturally occuring viruses (NOVS) and prevent the mRNAs from being translated into proteins, thereby preventing the NOV from replicating. The antisense viruses maintain the infectivity of the NOVs, allowing antisense RNAs to reach AAR48963
AAR48963
AAR48963
XX
AC
AAR4
XX
AC
AAR4
BD 12-S:-M
DT 25-M
DT 12-S:-M
Length 96;

Score 254; DB 2; Pred. No. 1.5e-29;

100.0%;

Best Local Similarity

Query Match

Sequence 96 AA;

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This sequence is a HIV-1 polypeptide that can be used in a recombinant plant virus used in the process of the invention. The process is for administering a polypeptide to an animal comprising: (a) infecting a plant cell with recombinant plant virus nucleic acid that will be processed in a plant cell to produce a fusion capsid protein (FCP), the properises a plant virus capsid protein (FVP) and a polypeptide that is not a PVCP, the PVCP being an alfalfa mossic virus (AlWW) capsid protein (CP) or ilarvirus CP thereby creating a infected cell; (b) cultivating the infected cell, or a derivative cell derived from the infected cell, under conditions where the infected cell or derivative cell makes the FCP, and (c) administering the FCP or a portion to an animal. The recombinant plant virus can also be used for production of colypeptides. The method is used particularly for the production of polypeptides which can be used for immunisation against pathogens such as thabdovirus or HIV. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                   ö
the mRNAs of the natural viruses. Antisense viruses such as these may be used for treating or preventing a viral infection, particularly \rm HIV-1, \rm HIV-2 or \rm SIV infection or hepatitis B infection. (Updated on 25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Production of poly:peptide(s), particularly for use in vaccines - by expression as fusion proteins with plant virus capsid protein in plant cells infected with virus.
                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Recombinant plant virus; HIV-1; protein production; immunisation; fusion capsid protein; alfalfa mosaic virus; ilarvirus; pathogen; rhabdovirus.
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                                                                                                                                 Length 96;
                                                                                                                                                                                                      1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
                                                                                                                                                                                                                           48 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
                                                                                                                                                                   0; Indels
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                                                                                                                             100.0%; Score 254; DB 2;
100.0%; Pred. No. 1.5e-29;
ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                 AAW53040 standard; peptide; 96 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human immunodeficiency virus 1.
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(first entry)
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                                                                                                                                                  l Similarity 100.
49; Conservative
                                                         to correct PN field.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HIV-1 polypeptide
                                                                                               Sequence 96 AA;
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17-JUL-1998
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Best Local S:
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Regulatory virus protein R; Vpr; antiviral; gene therapy; pathogenicity; structural analysis; cell cycle arrest.
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                                     HIV-1 regulatory virus protein R peptide sVprl-96.
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                                                                                                            Human immunodeficiency virus 1.
                                                                                                                                                                                     19-FEB-2000; 2000WO-DE000525.
            19-JAN-2001 (first entry)
                                                                                                                                                                                                                                                                                                  Henklein P,
                                                                                                                                                                                                                                                                                                                            WPI; 2000-565367/52.
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(HENK/) HENKLEIN P.
(WRAY/) WRAY V.
                                                                                                                                      WO200049038-A2
                                                                                                                                                                                                            19-FEB-1999;
19-FEB-1999;
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                                                                                                                                                              24-AUG-2000
                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                             water.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes a novel retroviral packing cell (I), comprising the retroviral genes gag, pol and glycoproteins GP-1 and GP-2 of the LCWV coding gene gp, or a part of these. The products of the invention have anti-HIV and cytostatic activity and can be used for gene therapy. (I) is useful for in vitro infection of cells, especially hematopoietic stem cells, for expression of transgenes in cells and as a pharmaceutical carrier for gene therapy. (I) is therefore useful in the treatment of infectious diseases (HIV or AIDS), neoplasms (carcinomas), melanomas and other diseases. This sequence represents the Human immunodeficiency virus (HIV-1) vpr protein described in the method of the invention. (Updated on 12-SEP-2003 to standardise OS field)
                                                                                                                                                                                                                       Glycoprotein, gag, pol; GP-1; GP-2; anti-HIV; cytostatic; gene therapy; treatment; infectious disease; HIV; AIDS; neoplasm; carcinoma; melanoma; vpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New retroviral packing cell useful as pharmaceutical carrier in gene therapy for treatment of HIV and neoplasms, comprises retroviral genes
 Gaps
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                        49
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                                     48 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRORRARNGASRS
                       1 ETYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 254; DB 3; 100.0%; Pred. No. 1.5e-29;
0; Mismatches
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                                                                                                          AAB10049 standard; protein; 96 AA
                                                                                                                                                                                                                                                                         Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                  99EP-00250415.
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(first entry)
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Best Local Similarity 100.
Matches 49; Conservative
49; Conservative
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                                                                                                                                                                                               HIV-1 vpr protein.
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02-NOV-2000
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Matches
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AAB10049
ID AAB1
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Wray

99DE-01008752.

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This invention describes novel synthetic peptides (I) derived from the regulatory viral protein R (Vpr) of human immunodeficiency virus-1 (HIV-1) which have antiviral activity and can be used for gene therapy. (I) is used for development of serological tests or enzyme-linked assays (ELISA) (ELISA) (e.g. for detecting or quantifying Vpr in blood), to raise specific antibodies and antisera (sepecially those reactive with specific epitopss), and as antiviral agents. (I) can also be used in screening for potential Vpr antagonists (i.e. compounds that modulate interaction of Vpr with cellular factors, transcription-cativating properties of Vpr, transport of Vpr and its incorporation into viral particles of Vpr., transport of Vpr and its incorporation into viral particles of Vpr). (I) is used to establish cell or animal cativities of Vpr). (I) is used to establish cell or animal models for studying pathogenicity of Vpr, for structural analysis of Vpr endice flexibility of Vpr induced by the N-terminal domain. Synthetic (I), are soluble in water and can be to reminal domain. Synthetic (I), are soluble in water and can be concentrated solutions (mmolar) without protein aggregation, so are well suited to analysis by nuclear magnetic resonance, X-ray or circular dichoism techniques. (I) adopt a folded structure, have biological activity comparable to that of viral Vpr, and can be produced, at high purity, on the milligram scale. This sequence represents the synthetic HIV-1 derived Vpr peptide sVprI-96 which is used in the method of the invention
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0; Mismatches 0; Indels
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100.0%;
Best Local Similarity 100.0%;
Matches 49; Conservative (
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RESULT 6 AAE16129

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Gaps

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0; Indels

Mismatches

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49

ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS 96

AAB10685 standard; peptide; 96 AA

AAB10685

AAB10685 ID AAB1 XX AC AAB1 RESULT 5

1 ETYGDTWAGVBAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS

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(first entry)

(revised)

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The present invention relates to compositions comprising Vpr polypeptides axe regulatory or auxiliary proteins encoded by a lentivirus, human immunodeficiency virus type 1 (HIV-1). The invention also relates to a method for delivering a cuplecule into a cell which comprises contacting the cell with a conjugate comprising a Vpr polypeptide, polymorleotide (DNA or RNA) or a toxin into a cell, preferably a cancer cell, or a cell infected with a comprisitions compositions comprisitions constructed with a pathogen such as lentivirus, HIV or retrovirus, bacterium or a parasite. Compositions comprisitions Vpr polypeptide conjugated to a toxin is useful for killing a cancer cell or a cell infected with a pathogen where the toxin is further conjugated to a regulatory molecule and the contact with the target cell exerts an effect on the regulatory molecule that results in activation of the toxin. The method is useful for inhibiting cell proliferation and treating a disorder associated with dysregulated cell growth in a subject. Vpr polypeptides when administered alone are useful cel increasing sensitivity to radiation therapy in a subject undergoing radiation therapy. They can also be used to treat hyperproliferative cell disorders such as malignancies, psoriasis and other disorders associated cell growth. Vpr polypeptides conjugated to a canging central for modulating the expression of a transgene cell increasing an immune response. The present sequence is synthetic Vpr increasing an immune response. The present sequence is synthetic Vpr
                                                                                                                                                                                   Human immunodeficiency virus type 1; HIV-1; auxiliary protein; cancer; Vpr protein; regulatory protein; pathogen; cell proliferation; therapy; dysregulated cell growth; hyperproliferative cell disorder; malignancy; radiation therapy; psoriasis; transgene expression; immune response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Delivering molecule into cell for inhibiting cell proliferation and killing target cell, comprises contacting cell with Vpr polypeptide, regulatory protein encoded by HIV type 1, alone or conjugated to
                                                                                                                                               Human immunodeficiency virus type 1 (HIV-1) sVpr protein.
AAE16129 standard; protein; 96 AA.
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                                                                                                                                                                                                                                                                                                                        Human immunodeficiency virus 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAY-2000; 2000US-0206610P.
09-FEB-2001; 2001US-0267827P.
20-APR-2001; 2001US-00839329.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-MAY-2001; 2001WO-US016943
                                                                                                                                                                                                                                                                                cytostatic, apoptotic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCHUBERT U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HENK/) HENKLEIN P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200190159-A2
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                                                                                     29-AUG-2003
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                                                                                                       26-MAR-2002
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                                          AAE16129
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17. .29
/label= Alpha_1_helix 36. 47 - - - // label= Alpha_2_helix 53. .78 /label= Alpha_3_helix

Location/Qualifiers

De Noronha CMC;

Greene WC,

Sherman MP,

Д,

Henklein

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The present invention describes a chimeric bifunctional molecule (I)

comprising at least a first functional molecule covalently linked to a

second functional molecule, which is able to modulate the activity of the

permeability transition pore complex (PPPC) of the mitochondria. (I) has

the function of specifically targeting and entering a tissue cell

copulation. The second functional molecule has the function of

specifically targeting, and inducing or preventing the death of the cells

specifically targeting, and inducing or preventing the death of the chordor or its fragment. (I) has virucide, neuroprotective,

captoropic and cytostatic activities, and can be used as a mitochondrial correcting or preventing a pathologies, infection or disease. (I) is useful for treating or preventing cell death regulatory molecules, specifically the apoptogenic function of the PTPC, for treating e.g. cancer, ischaemia,

capoptogenic function of the PTPC, for treating e.g. cancer, ischaemia,

neurodegenerative diseases, fullminant hepatitis or viral infections. The

present sequence represents the HIV-1 viral protein R (Vpr) amino acid

sequence, which is given in the exemplification of the present invention.

(Updated on 29-AUG-2003 to standardise OS field)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         permeability transition pore complex; virucide; neuroprotective; vasotropic; cytostatic; infection; cell death regulation; apoptosis; mitochondrial permeability transition pore complex modulator; cancer; apoptogenic; ischaemia; neurodegenerative disease; fulminant hepatitis.
                                                                                                                                         Gaps
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pore
e.g.
svpr) protein from HIV-1. (Updated on 29-AUG-2003 to standardise
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New chimeric bifunctional molecules that target specific cells regulate the apoptosis function of the permeability transition complex of the mitochondria, useful for treating or preventing
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                                                                                                     Length
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                                                                                                   100.0%; Score 254; DB 5; 100.0%; Pred. No. 1.5e-29;
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                                                                                                                                                                                                                                                                                                                     ABP56175 standard; peptide; 96 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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(CNRS ) CENT NAT RECH SCI
                                                                                                                                         49; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
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                                                                                                                         Similarity
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                                                              Sequence 96
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Best Local
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ADD01277 standard; protein; 96 AA.

ADD01277

ADD01277;

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Gaps

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The invention relates to a method for detecting immunodeficiency virus in a sample in which the presence of Upr (not defined) protein in the sample is detected. Also included are a kit for use in the above detecting method containing a cell and a pigment, and a method for screening a compound promoting or inhibiting the intake of a substance having a molecular weight (M.W.) of 300 to 3000 in which the promotion or the inhibition of intake of the substance by the presence of a test compound is used as the index in the intake of the substance to the cell by a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               treatment using a sample containing Vpr protein. The method is used for detecting immunodeficiency virus (e.g. Human immunodeficiency virus-1, the causative agent of acquired immunodeficiency virus syndrome, ALDS) in a sample. The present sequence represents HIV-1 Vpr. (Updated on 29-AUG-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Detection of immunodeficiency virus by detecting the presence of Vpr
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                                                                                            1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS 49
                                                                                                                             96
                                 Length 96;
                                                                                                                    48 ETYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
                                                                Indels
                                                                                                                                                                                                                                                                                                                                                          HIV-1; acquired immunodeficiency syndrome; AIDS; Vpr.
                                                                0
                              100.0%; Score 254; DB 5;
100.0%; Pred. No. 1.5e-29;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 254; DB 5;
100.0%; Pred. No. 1.5e-29;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (KOKU-) KOKURITSU YOBO EISEI KENKYUSHO.
(ORIY ) ORIENTAL YEAST CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "Encoded by CAT'
                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 8; 17pp; Japanese.
                                                                                                                                                                                                          AAU80187 standard; protein; 96 AA
                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-SEP-2000; 2000JP-00280851.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000JP-00280851
                                                                                                                                                                                                                                                                                             (first entry)
                                                                49; Conservative
                                                                                                                                                                                                                                                                              (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-378279/41.
                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                          HIV-1 Vpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; ABK50386.
Sequence 96 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 96 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JP2002085099-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-SEP-2000;
                                                                                                                                                                                                                                                                           29-AUG-2003
15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-2002
                                                                                                                                                                                                                                            AAU80187;
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                                                                Matches
                                                                                                                                                                                           AAU80187
ID AAU8
                                                                                                                                                                            RESULT 8
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lentivirus protein R; Vpr; inhibitor; cellular chaperone; folding; stability; cyclophilin A; CyPA; cell-cycle arrest; apoptosis; glucocorticoid receptor coactivation; anti-HIV; nootropic; nephrotropic; antilipemic; antiretroviral; AIDS; infection; HIV-induced dementia; lipodystrophy syndrome; lipid metabolism; HIV-associated nephropathy.
                                                                                                                                                                (MEDI-) MEDICIS VENTURES MANAGEMENT GMBH.
                                  HIV-1 Vpr CyPA protein binding motif.
                                                                                          Human immunodeficiency virus 1.
                                                                                                                                                                              Bruns K;
                                                                                                                                    25-OCT-2002; 2002WO-DE004052.
                                                                                                                                                  25-OCT-2001; 2001DE-01053902.
                    (first entry)
                                                                                                                                                                                           WPI; 2003-430506/40.
                                                                                                                                                                              Tessmer
                                                                                                       WO2003038032-A2
                    01-JAN-2004
                                                                                                                      08-MAY-2003.
                                                                                                                                                                              Will H,
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Agent for inhibiting lentivirus Vpr protein, useful for treatment and prevention of infection by human immune deficiency virus, is inhibitor of chaperone enzyme.

German. Disclosure, Fig 4; 41pp; This invention describes a novel agent (A), for inhibiting the primate CC lentivirus protein R (Vpr) of HIV-1 or -2, or simian immune deficiency virus, comprising an inhibitor (I) of cellular chapterones (II) that are casential for proper folding, stability and, thus, biological function of vpr. The inhibitor is useful for inhibiting interaction of Vpr with cyclophilin include cyclosprin A, RKSG6, reapmycin and the non-cimmunosuppressive compounds SDZ NUMBIL and/or sanglipherin A. Vpr first binds to cyclophilin A (CyPA) to regulate the trans conformation of proline peptidyl bonds in the N-terminus of Vpr. The inhibitor prevents cis-trans rearrangement, specifically of Pro residues at positions 5, 10, 14 and 35 of Vpr. The inhibitor may also act by a process in which CyPA co-translationally regulates expression, folding and stability of Vpr and co-translationally regulates expression, folding and stability of Vpr and co-translationally regulates expression, folding and stability of Vpr and co-translationally regulates expression, folding and stability of Vpr and specified viruses with DNA that encodes Vpr, or with recombinate Vpr coding retro, adeno, vaccinia or baculo viruses. All essential concisions of Vpr (induction of Call-cycle arrest, apoptosis, increased virusing process is activation of glucocorticola receptors) are inhibited. The products of the invention have anti-HIV, nootropic, inhibited. The products of the invention and administration with other antirerroviral agents; blockers of reverse concisions and antilipemic activity. The inhibitor may be used in combination and/or protease; genetically based antiretroviral cranscription and/or peripheral Call without and administration of anti-HIV gene in seem calls and door peripheral calls and endothedial and endothedial calls in cerebral caption endomes appecially and administration of neurons, glial calls and endothedial calls of prevent systemic contaminated blood. This sequence represents the Cypa binding fragment at the Naccinal contaminated blood. T

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Gaps

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Best Local Similarity 100. Matches 49; Conservative

49 96

ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS 1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS

48

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Query Match

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Matches

8

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New polypeptides that bind to viral Vpr protein, useful for treatment, prevention, diagnosis and prognosis of immune deficiency virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to peptide which are capable of binding to are Ho HIV protein Vpr and/or modulates Vpr-related activity. Such peptides are used for prevention, treatment, diagnosis and prognosis of Vpr-related diseases, particularly lentiviral infection (specifically HIV-1 or 2, or similan immune deficiency virus), for modulating, particularly inhibiting, Vpr-related activities and for detecting Vpr in a sample. Nucleic acids encoding such peptides and cells that contain this nucleic acid can also be used therapeutically. The present sequence is a protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           immunogenic mutant HIV gp120; human immunodeficiency virus; HIV; gp120; immunogenic; vaccine; HIV neutralising antibody; anti-HIV; HIV binding agent; immunisation; HIV-1; infection; HIV-1 isolate JRCSF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ETYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRORRARNGASRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus 1 isolate JRCSF vpR protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 254; DB 8;
100.0%; Pred. No. 1.5e-29;
live 0; Mismatches 0;
                                                                                   HIV; Vpr; modulator; anti-HIV; virucide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 20; Page 33-34; 143pp; English.
                                                                                                                    Human immunodeficiency virus type
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                                                                                                                                                                                                                                                                                                                                     Cohen EA, Yao X, Belhumeur P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADP20070 standard; protein; 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human immunodeficiency virus 1,
                                                                                                                                                                                                                            07-MAR-2003; 2003WO-CA000325.
                                                                                                                                                                                                                                                                08-MAR-2002; 2002US-0362384P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  relevance to the invention
             (first entry)
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                                                                                                                                                                                                                                                                                                   (UYMO-) UNIV MONTREAL
                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-042337/04.
                                             HIV-1 Vpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                        WO2003076621-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 96 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2004053100-A2
             22-APR-2004
                                                                                                                                                                                            18-SEP-2003
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Best Local Simi
Matches 49;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a method of producing a recombinant HIV-1 virus protein R (Vpr) protein or a protein having one or more substitutions, additions or alterations and having biological activity, by transforming a host Escherichia coli cell with an expression vector containing the gene encoding Vpr, and culturing the transformed cell. The method is producing the recombinant Vpr protein. The protein is useful for producting the immunodeficiency virus in cell, tissue or organ derived from an organism. The protein is useful for an animalysis of the Vpr protein. This sequence represents the HIV-1 Vpr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Producing recombinant virus protein R (Vpr), useful in promoting immunodeficiency virus reproduction, involves transforming a host cell with an expression vector for the protein.
                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96
                                         Length 96;
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                                                                          Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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                                  100.0%; Score 254; DB 7; 100.0%; Pred. No. 1.5e-29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 100.0%; Score 254; DB 8; Local Similarity 100.0%; Pred. No. 1.5e-29; les 49; Conservative 0; Mismatches 0;
                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                           virus protein R; Vpr; functional analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 1; 14pp; Japanese.
                                                                                                                                                                                                                                        Æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABM79669 standard; protein; 96 AA
                                                                                                                                                                                                                                ADF46812 standard; protein; 96
                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-MAR-2002; 2002JP-00066938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-MAR-2002; 2002JP-00066938
                                                 Local Similarity 100.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NAKA/) NAKAMURA T
                                                                                                                                                                                                                                                                                                                                           HIV-1 Vpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; ADF46813.
Sequence 96 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 96 AA;
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16-SEP-2003

ADF46812;

RESULT 10

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> 11-DEC-2003; 2003WO-US039534. 11-DEC-2002; 2002US-0432869P. 24-APR-2003; 2003US-0465350P.

Query Match

Matches

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protein.

ABM79669

RESULT 11
ABM79669
ID ABM79
XX
AC ABM79

Length 96;

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us-09-913-927d-3.rag

N-PSDB;

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84GB-00029099.
85US-00771248.
88US-00158652.
92US-00953060.
94US-00195024.
                                                                               2000US-00709316
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(CNRS ) CENT NAT RECH SCI.
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Best Local Similarity 98.0°
....hes 48; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
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                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-236717/22.
N-PSDB; ADP81478.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 95 AA;
                                                                                                                                                         30-AUG-1985;
22-FEB-1988;
05-NOV-1992;
14-FEB-1994;
31-DEC-1997;
US6706268-B1
                                                                               13-NOV-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-SEP-1995;
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                                       16-MAR-2004
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17-OCT-1996
                                                                                                                                          16-NOV-1984
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                                                                                                                                                                                                                                                                                                                                            Alizon M,
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  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                            the present inventors describes an immunogenic mutan immunodeficiency virus (HYV). Also described: (1) an immunogenic human immunodeficiency virus (HYV). Also described: (1) an immunogenic mutan immunodeficiency virus (HYV). Also described: (1) an immunogenic mutan immunodeficiency virus (HYV). Also described: (1) an immunogenic mutan third spilo polypeptide a panel of HIV-1 comprising HIV-1 primary isolates of at least two different clades, where the mutant gpl20 has at least one amino acid mutation in at least one amino acid mutation in at least one minon acid mutation of the polypeptide specifically bound by a neutralising antibody, (2) an immunogenic mutation in at least one pairope of the gpl20 polypeptide specifically bound by a neutralising antibody; (3) a vaccine (II) comprising one or mucation in at least one epitope of the gpl20 polypeptide specifically bound by a non-neutralising antibody; (3) a vaccine (II) comprising one or mucation in a the antiserum (III) botained by using (ID) or (II); (5) an antiserum (III) botained by using (ID) or (II); (6) a substantially purified HIV neutralising antibody (V) obtained by using (ID) or (II); (6) a substantially mutation or ameliorating HIV assublect, by administering an HIV neutralising antibodies (ID) or (II); (7) and (II) infection in a human subject, involves administering HIV neutralising antibodies (VII) produced by using (ID); and (II); (9) HIV neutralising antibodies (VII) produced by using (ID); and (II) isolated HIV-1 neutralising antibodies (VII) obtained by using (ID); and (II) isolated HIV-1 neutralising antibodies (VII) obtained by using (ID); and (II) isolated HIV-1 neutralising antibodies (VII) obtained by using (ID); and (II) isolated HIV-1 neutralising antibodies (VII) obtained by using (ID); and (II) isolated HIV-1 neutralising antibodies (VII) obtained by using (ID); and (II) isolated HIV-1 neutralising antibodies (VII) obtained by using (ID); and (II) isolated which involves immunishing a subject with a live specially HIV-1.

C) MRSS From
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                            Immunogenic mutant HIV-1 gp120 polypeptide, and antibodies raised against the polypeptide, useful preventing or treating human immunodeficiency virus (HIV) infection, especially HIV-1 infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                    present invention describes an immunogenic mutant HIV gp120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
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                                                                                                                                                                                                                                                          Disclosure; Page 138; 149pp; English
                                                        Pantophlet R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADP81477 standard; protein; 95
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                (SCRI ) SCRIPPS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48; Conservative
                                                      Burton DR, Wilson I,
                                                                                              2004-480933/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV-1 vpr protein.
                                                                                                                     ADP20074.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      present invention
                                                                                                                                      GENBANK; M38429
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Matches

ð 셤 RESULT 13 ADP81477

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The invention relates to a new purified peptide encoded by the vpr ger of HVV-1 is free of particles of the virus. The peptide is useful for preparing a composition for diagnosing or treating HIV infection. The present sequence represents the HIV-1 vpr protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chimeric; infection; replication; reduction; RNase; protease; virion assembly; morphogenesis; steric hindrance inducer; targetted; mature viron; structural organisation; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Native; Vpr protein; HIV-1 LAI strain isolate; chimaeric molecule;
                                                                                                                                                  New purified peptide encoded by the vpr gene of HIV-1, useful for preparing a composition for diagnosing or treating HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Checroune F, Yao X, Pignac-Kobinger G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 250; DB 8; Length 95
Pred. No. 5.7e-29;
1; Mismatches 0; Indels
Wain-Hobson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Native Vpr protein from HIV-1 LAI strain isolate.
Danos O,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR94544 standard; protein; 96 AA
Stewart C,
                                                                                                                                                                                                                                              Claim 1; Col 10; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human immunodeficiency virus 1.
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WPI; 1996-171615/17.
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Targetting mature HIV virion(s) using HIV Vpr, Vpx or p6 proteins - for affecting structural organisation or function or for inhibiting

Claim 8; Page 43; 68pp; English.

The present sequence is the native Vpr protein from the HIV-1 LAI strain isolate, which can be used in the development of a chimaeric mol. comprising the present sequence and another mol., pref. a HIV infectivity or replication reducing protein fragment, i.e. a RNase and/or protease, a affector of a viral protein interaction responsible for viral infectivity and/or morphogenesis steric hindrance inducer and/or an and/or replication. The chimaeric mol. can be specifically targetted into the mature HIV-1 virion, to affect its structural organisation and/or functional integrity, i.e. gene therapy of HIV-1 infection. Vpr protein fragments can also be used to prevent viral replication by interfering with the protein interactions responsible for Vpr incorporation into the mature HIV-1 genome. (Updated on 16-OCT-2003 to standardise OS field)

Sequence 96 AA;

Gaps ö 98.4%; Score 250; DB 2; Length 96; 98.0%; Pred. No. 5.8e-29; Live 1; Mismatches 0; Indels 48; Conservative Best Local Similarity Matches 48: Conserve Query Match ઠે

RESULT 15 AAY53247

g

AAY53247 standard; protein; 96 AA.

AAY53247;

(revised)
(first entry) 17-JUL-2000 12-SEP-2003

HIV-1 LAI strain Vpr protein SEQ ID NO:1.

HIV-1; HIV-2; virion; Vpr; Vpx; p6; chimeric; infection; anti-HIV; gene therapy.

Human immunodeficiency virus 1.

US6043081-A

28-MAR-2000

95US-00524694 07-SEP-1995;

94US-00301915. 07-SEP-1994;

(UYMO-) UNIV MONTREAL.

Yao X, Pignac-Kobinger G,

Expression vector useful for reducing infectivity of HIV or for targeting into HIV virions, comprises nucleic acid segment encoding recombinant or chimeric protein comprising a Vpr/Vpx virion incorporation domain. Bergeron D; WPI; 2000-270343/23.

Cohen EA,

Checroune F,

Claim 1; Col 7-8; 32pp; English.

The present invention describes an expression vector (I) comprising a nucleic acid segment encoding a recombinant protein for interfering with the incorporation of native Vpr/Vpx into HIV-1 or HIV-2 virion or a chimeric protein that is incorporated into an HIV-1 or HIV-2 virion,

enkaryotic or prokaryotic cell transformed with (1); (2) a composition for reducing infectivity of HIV-1 or HIV-2 in vitro comprising an effective amount of (1) in association with a pharmaceutically acceptable virion comprising an effective amount of (1) in association with a pharmaceutically acceptable virion comprising an effective amount of (1) in association with a used in gene therapy. (1) is useful for reducing infectivity and can be vitro and for targeting into an HIV-1 or HIV-2 virion. The present in the exemplification of the present in the exemplification of the present invention. (Updated on 12-SEP-2003) (1) linked to a promoter. Also described the exemplifica standardise OS 88888888888888888

Sequence 96 AA;

Gaps ö 98.4%; Score 250; DB 3; Length 96; 98.0%; Pred. No. 5.8e-29; ive 1; Mismatches 0; Indels Query Match
Beet Local Similarity 98.0%,

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1 ETYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS 49

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Search completed: October 18, 2004, 18:45:33 Job time : 65.3125 secs

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Sequence 5, App
Sequence 4, App
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Sequence 2, A
Sequence 2, A
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               GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
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US-08-524-694A-1

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i Sequence 19, Application US/09718096

j Factor No. 6589763

i GENERAL INFORMATION:

APPLICANT: Von Laer, Melke-Dorothee

i TILE OF INVENTION: RETROVIRAL HYBRID VECTORS PSEUDOTYPED WITH LCMV

FILE REFRENCE: 35-195

CURRENT APPLICATION NUMBER: US/09/718,096

CURRENT FILING DATE: 2000-11-22

PRIOR APPLICATION NUMBER: BF 99250415.9

PRIOR FILING DATE: 1999-11-25

PRIOR FILING DATE: 1999-11-25

PRIOR FILING DATE: 1999-05-11

NUMBER OF SEQ ID NOS: 26

SOFTWARE: Patentin Ver. 2.0
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Fatent No. 6440730

GENERAL INFORMATION:

APPLICANT: Heinrich-Pette-Institut

ITLE OF INVENTION: Retroviral hybrid vectors pseudotyped with LCMV

FILE REFERENCE: P50489

CURRENT APPLICATION NUMBER: US/09/309,572

CURRENT FILING DATE: 1999-05-11

BARLIER FILING DATE: 1999-11-26

NUMBER OF SEQ ID NOS: 24

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 19

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US-09-009-953-128
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US-09-521-91A-24912
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US-08-209-797-30
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                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/09839329

Fatent No. 6664040

GENERAL INFORMATION:
APPLICANT: Michael P. Sherman
APPLICANT: Michael P. Sherman
APPLICANT: Garlos M.C. de No. 66640400hna
APPLICANT: Carlos M.C. de No. 66640400hna
APPLICANT: Ulrich Schubert
APPLICANT: Peter Henklein
ITLE OF INVENTION: OMPOSITIONS AND METHODS FOR DELIVERY OF
TITLE OF INVENTION: A MOLECULE INTO A CELL
FILE OF INVENTION: A MOLECULE INTO A CELL
FILE REFERENCE G&C 30448.31-105-02
CURRENT FILING DATE: 2010-04-20
PRIOR APPLICATION NUMBER: 60/266,610
PRIOR PILING DATE: 2000-05-23
PRIOR PILING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-3

NUMBER OF S&Q ID NOS: 5

SOFTWARE: FASTSEQ for Windows Version 4.0

S&Q ID NO 1

EBNOTH: 96
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                                                                                                                                                                           DB 4; Length 96;
                                                                                                                                                                                                                                                              1 BTYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRORRARNGASRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 254; DB 4; Length 96; 100.0%; Pred. No. 7e-31; tive 0; Mismatches 0; Indels
                                                                                                                                                                    ch 100.0%; Score 254; DB 4; Length 9. Similarity 100.0%; Pred. No. 7e-31; 49; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/08301915
Patent No. 5861161
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: CHEN, Eric A.
APPLICANT: CHENCONUE, Florent
APPLICANT: CHENCONUE, Florent
APPLICANT: PIGNAC-YOBINGER, Gary
ITILE OF INVENTION: PROTEIN TARGETING INTO HIV VIRIONS
ITILE OF INVENTION: PROTEIN TARGETING NO HIV-1 VPR FUSION MOLECULES
NUMBER OF SEQUENCES: 5
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Continental Plaza, 411 Hackensack Avenue
                                   TYPE: PRT ORGANISM: Human immunodeficiency virus type 1
                                                                                                  ; OTHER INFORMATION: vpr protein US-09-718-096-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
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                                                                                                                                                                    Query Match
Best Local Similarity
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Best Local Similarity
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US-08-301-915-1
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                                                                             FEATURE:
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Gaps
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STATE: N.J.
COUNTRY: U.S.A.
ZIP: 07601
COMPUTER READALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/524,694A
FILING DATE: September 7, 1995
FILING DATE: September 7, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: KLAUBER & JACKSON
STREET: Continental Plaza, 411 Hackensack Avenue
CITY: Hackensack
                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/301,915
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/WS-DOS
                                                                                                        APPLICALL.

FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: JACKSON, David A.
REGISTRATION NUMBER: 26,742
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEPHONE: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: JACKSON, David A.
REGISTRATION NUMBER: 26,742
TELECOMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEFAX: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
Best Local Similarity 98.09
                                                                                                                                                                                                                                                                         TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 96 amino acids
                                                                                                                                                                                                                                                                                                                                                                    single
                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: KLAUBER &
                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                       linear
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48 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARDGASRS 96
                                                                                                                                                                                                                       APPLICANT: Your Story Hilary
APPLICANT: You bown you dad APPLICANT: You bown you dad APPLICANT: You bown you dad APPLICANT: You bown you dad APPLICANT: Hooper, Douglass, C. APPLICANT: Modelska, Anna TITLE OF INVENTION: Polypeptides Fused with Plant Virus TITLE OF INVENTION: Coat Proteins NUMBER OF SEQUENCES: 16 CORRESPONDENCE ADDRESS: ADDRESSE: ALlan H. Fried & Associates STREET: 15-25 Locust Street, 15th Floor CITY: Philadelphia STRATE: Pennsylvania COUNTRY: USA ZIP: 19102
COUNTRY: USA ZIP: 19102
COUNTRY: USA ZIP: ADDRESS FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15, Application US/09242881
Patent No. 6448070
GENERAL INFORMATION:
APPLICANT: Koprowski, Hilary
Yugibov, Vidadi
Hooper, Douglas, C.
Modelska, Anna
TITLE OF INVENTION: Polypeptides Fused with Plant Virus
Coat Proteins
                                 1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
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CORRESPONDENCE ADDRESS:
ADDRESSER: Allan H. Fried & Associates
STREET: 1525 Locust Street, 15th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 98.0%; Score 249; DB 3; Best Local Similarity 98.0%; Pred. No. 4e-30; Matches 48; Conservative 1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: FLORDY Disk
COMPUTER: FLORDY Disk
COMPUTER: FLORDY Disk
COMPUTER: BM PC Compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: COREL WORDPERFECT
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/704,856C
FILING DATE: 28-Aug-1996
CLASSIFICATION:
NAME: FTied, Allan H.
REJENENCE/DOCKET NUMBER: 119-007
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
SEQUENCE CLARACTERISTICS:
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Patent No. 6042832
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: CENERON, Eric A.
APPLICANT: BERGERON, Dominique
APPLICANT: CHECROUNE, Florent
APPLICANT: CHECROUNE, Florent
APPLICANT: TAO, Xiao-Jian
APPLICANT: PIGNAC-KOBINGER, Gary
TITLE OF INVENTION: PROTEIN TARGETING INTO HIV VIRIONS
TITLE OF INVENTION: BASED ON HIV-1 VPR FUSION MOLECULES
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: KLAUBER & JACKSON
STREET: Continental Plaza, 411 Hackengack Avenue
                                                                                                                                                                                                                                                                                                                                                1 ETYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
                                                                                                                                                                                                                                                        Length 96;
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                                                                                                                                                                                                                                                                                                0, Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: TBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/454,156A
FILING DATE:
                                                                                                                                                                                                                                                      Score 250; DB 3;
Pred. No. 2.8e-30;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/09454156A; Patent No. 6468539; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/301,915
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: JACKSON, David A. REGISTRATION NUMBER: 26,742 TELECOMMUNICATION INFORMATION: TELEPHONE: 201-487-5800 TELEFAX: 201-343-1684
                                                                                                                                                                                                                                                        98.4%;
98.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 96 amino acids
                                                                                                                                                                                                                                   Query Match
Best Local Similarity 98.09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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NO
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                                                                                                                 single
                                                                                                                                                         MOLECULE TYPE: protein HYPOTHETICAL: NO
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STRANDEDNESS: single
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Best Local Similarity
Matches 48; Conserva
                                                                                         TYPE: amino acid STRANDEDNESS: siz
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STATE: N.J.
COUNTRY: U.S.A.
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HYPOTHETICAL:
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Sequence 115, Application US/09462917A

Factor No. 6511801

GENERAL INFORMATION:

APPLICANT: Delaporte, Eric

APPLICANT: Seman, Eric

TITLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof

TITLE OF INVENTION: HINS:014 11362.0014.NPUS00

CURRENT APPLICATION NUMBER: US/09/462,917A

CURRENT APPLICATION NUMBER: DET/FEP98/04522

FRIOR APPLICATION NUMBER: DET/FEP98/04522

FRIOR FILING DATE: 1998-07-20

NUMBER OF SEQ ID NOS: 152

SEQ ID NO 115

LENGTH 100

TANDEL DATE: 100

TANDEL DATE: 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                      49 TYGDTWEGVEAIIRILQQLLFIHYRIGCQHSRIGITPQRR-RNGTSRS 95
                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Felcas, Martine
APPLICANT: Seman, Exic
APPLICANT: Seman, Exic
APPLICANT: Vanden Haesevelde, Marlen
TITLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof
FILE REFERENCE: INNS:014 11362.0014.NPUSO
CURRENT FILING DATE: 2000-04-03
PRIOR APPLICATION NUMBER: US/09/462,917A
PRIOR APPLICATION NUMBER: PCT/EP98/04522
PRIOR RILING DATE: 1998-07-20
NUMBER OF SEQ ID NOS: 152
SOFTWARE: Patentin version 3.0
LENGTH: 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      77.6%; Score 197; DB 4; Length 100; 73.6%; Pred. No. 3.2e-22; Live 4; Mismatches 6; Indels
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                                                                                                                                                                                              Sequence 118, Application US/09462917A
Patent No. 6511801
                                                                                                                                                                                                                                                                                                                  Delaporte, Eric
Peeters, Martine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 71.00
Best Local Similarity 73.69
Matches 39; Conservative
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APPLICANT: Delapor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Human
US-09-462-917A-118
                                                                                                                                                            US-09-462-917A-118
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ORGANISM: Human
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Sequence 10, Application US/09319588C

Patent No. 6509018

GENERAL INFORMATION:
APPLICANT: INSTITUT PASTEUR
APPLICANT: MASISTANCE PUBLIQUE-HOPITAUX DE PARIS
APPLICANT: MASISTANCE PUBLIQUE-HOPITAUX DE PARIS
APPLICANT: MAUCLERE, Philippe
APPLICANT: LOUSSERT-AJARA, Ibrissam
APPLICANT: SIMON, Francois
APPLICANT: SIMON, Francois
APPLICANT: SARAGOSTI, Sentob
APPLICANT: SARAGOSTI, Sentob
APPLICANT: BARRE-SINOUSSI, Francoise
ITILE OF INVENTION: NON-M NON-O HIV STRAINS, FRAGMENTS AND APPLICATIONS.
FILE REFERENCE: 598USI2:
CURRENT FILING DATE: 1999-08-27
FRIOR APPLICATION NUMBER: FRS6/15087
FRIOR APPLICATION NUMBER: FRS6/15087
FRIOR APPLICATION NUMBER: PRS6/15087
FRIOR FILING DATE: 1996-12-09
NUMBER OF SEQ ID NOS: 98
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
98.0%; Score 249; DB 4; Length 96;
Best Local Similarity 98.0%; Pred. No. 4e-30;
Matches 48; Conservative 1; Mismatches 0; Indels
                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy Disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: COTEL WordPerfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/242,881
FILING DATE: 25-Peb-1999
CLASSIFICATION: cUnknown>
PRIOR APPLICATION: cunknown>
PRIOR APPLICATION: AURHORNES
ADDITATION DATA:
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FILING DATE: «Unknown>
ATTONEY/AGENT INFORMATION:
NAME: Fried, Allan H.
REGISTRATION NUMBER: 31,253
REFERENCE/DOCKET NUMBER: T19-007
TELECHONEY (215) 732-7090
TELEPHONE: (215) 732-7090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Human immunodeficiency virus type 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HYPOTHETICAL: N
SEQUENCE DESCRIPTION: SEQ ID NO: 15:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 96 amino acids
STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
HETICAL: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
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à ద RESULT 12
US-09-462-917A-116
Sequence 116, Application US/09462917A
Patent No. 6511801
GENERAL INFORMATION:

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Gaps

Query Match
82.9%; Score 210.5; DB 4; Length 95;
Best Local Similarity 85.4%; Pred. No. 2.7e-24;
Matches 41; Conservative 3; Mismatches 3; Indels

2 TYGDTWAGVEALIRILOOLLFIHFRIGCRHSRIGVTRORRARNGASRS

APPLICANT: Delaporte, Eric

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APPLICANT: BERGERON, Dominique
APPLICANT: CHECROUNE, Florent
APPLICANT: CHECROUNE, Florent
APPLICANT: TAC, Xiao-Jian
APPLICANT: TAC, Xiao-Jian
APPLICANT: PAO, Xiao-Jian
APPLICANT: PROFINI PROFINI PROFINI INTO HIV VIRIONS
TITLE OF INVENTION: BASED ON HIV-1 VPR FUSION MOLECULES
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
STREET: CONTINUAL Plaza, 411 Hackenback Avenue
                                                                                                                                                                                                                                                                                                              Length 78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/301,915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51.6%; Score 131; DB 2;
100.0%; Pred. No. 2.2e-12;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                           52.0%; Score 132; DB 3; 96.2%; Pred. No. 1.7e-12; tive 1; Mismatches 0
                                                                                                                                                                                                                         TYPE: PRT; ORGANISM: Human imunodeficiency virus type 1
US-09-124-900-5
                                CURRENT APPLICATION NUMBER: US/09/124,900
CURRENT FILING DATE: 1998-07-30
PRIOR PILING DATE: 1998-07-30
PRIOR PILING DATE: 1995-04-19
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin version 3.0
SSOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                               1 ETYGDTWAGVEAIIRILQQLLFIHFR 26
                                                                                                                                                                                                                                                                                                                                                                                                                                      ETYGDTWAGVEAIIRILQQLLFIHFQ 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/08301915
Patent No. 5861161
GENERAL INFORMATION:
                       HIV-Vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: JACKSON, David A.
REGISTRATION NUMBER: 26,742
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
TELEFAX: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 72 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 96.2
Matches 25, Conservative
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Best Local Similarity 100.8
Matches 25; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: N.J.
COUNTRY: U.S.A.
ZIP: 07601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 133521
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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CITY: Hackensack
STATE: N.J.
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                       TITLE OF INVENTION:
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TELEX: 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 117, Application US/09462917A

Patent No. 6511801

GENERAL INFORMATION

APPLICANT: Delaporte, Eric

APPLICANT: Saman, Eric

APPLICANT: Saman, Eric

APPLICANT: Saman, Eric

APPLICANT: Vanden Haesvelde, Marlen

TITLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof

TITLE OF INVENTION: 11362.0014.NPUS00

CURRENT FILING DATE: 2000-04-03

PRIOR APPLICATION NUMBER: PCT/EP98/04522

PRIOR PRIJECATION NUMBER: PCT/EP98/04522

NUMBER OF SEQ ID NOS: 152

SOFTWARE: Patentin version 3.0

SECTION OF SEQ ID NOS: 152
        APPLICANT: Saman, Eric
APPLICANT: Saman, Eric
TILLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof
TILLE OF INVENTION: HIV-1 Group O Antigens and Uses Thereof
FILE REFERENCE: INNS:014 11362.0014 NPUS00
CURRENT APPLICATION NUMBER: US/09/462,917A
CURRENT FILING DATE: 200-04-03
PRIOR PRILING DATE: 1998-07-20
PRIOR FILING DATE: 1998-07-20
NUMBER OF SEQ ID NOS: 152
SOFTWARE: Patentin Version 3.0
SEQ ID NO 116
LENGTH: 100
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Pred. No. 1.7e-19;
7; Mismatches 7; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVT 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Sequence 5, Application US/09124900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BUCHACHER, Andrea ERNST, Wolfgang BALLAUN, Claudia PURTSCHER, Martin TRKOLA, Alexandra PREDL, Renate SCHMATZ, Christine KLIMA, Annelies STEINDL, Franz
                                                                                                                                                                                                                                                                                                                                                    70.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KATINGER, Hermann
Peeters, Martine
                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 65.4°
Matches 34; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 83.8
Matches 31; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No. 6268484
GENERAL INFORMATION:
APPLICANT: KATINGE
                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                           US-09-462-917A-116
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US-09-124-900-5
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APPLICANT:
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Tue Oct 19 14:39:34 2004

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Search completed: October 18, 2004, 18:49:23 Job time : 29.5833 secs

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Query Match 100.0%; Score 254; DB 9; Length 96; Best Local Similarity 100.0%; Pred. No. 1.5e-28; Matches 49; Conservative 0; Mismatches 0; Indels
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                                                                                            October 18, 2004, 18:43:30 ; Search time 88.8125 Seconds (without alignments) 178.383 Million cell updates/sec
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Sequence
Sequence
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Sequence 2
Sequence 2
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Sequence
Sequence
Sequence
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                                                                                                                                                                             254
1 ETYGDTWAGVEAIIRILQQL......RHSRIGVTRQRRARNGASRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Published Applications AA:*

1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/PCTUB_PUB.COMB.pep:*
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15: /cgn2_6/ptodata/2/pubpaa/US106_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US106_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*
17: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
19: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
19: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd.
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US-10-190-435-285
US-10-190-435-285
US-10-190-435-265
US-10-190-435-274
US-10-190-435-278
US-10-190-435-273
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US-10-190-435-264
US-10-190-435-265
US-10-190-435-266
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                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                              1360919 seqs, 323318874 residues
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                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                               - protein search, using sw model
                                                                                                                                                                                                                          BLOSUM62
Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
                                                                                                                                                            US-09-913-927D-3
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Match Length
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                                                                                              Run on:
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Sequence 255, App
Sequence 279, App
Sequence 10, Appl
Sequence 281, App
Sequence 229, App
Sequence 293, App
                                                           4, Appli
1475, Ap
258, App
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, Appli
68, App
                                                                                                                                                  269, App
11, Appl
36, Appl
275, App
282, App
277, App
                                                                                                                                                                                                                                                                                                                       Sequence 51, Appl
Sequence 1476, Ap
Sequence 231, App
                           Sequence 256, A
Sequence 257, A
Sequence 283, A
                                                                                                                                                                        Sequence 36, Agentee 275, Pequence 282, Sequence 281, Sequence 261, Sequence 280, Sequence 280, Sequence 254, Fe
                                                                                                                                       268,
269,
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US-09-839-325-1
                                                           Sequence 4
Sequence 1
Sequence 2
Sequence 2
Sequence 2
Sequence 2
Sequence 2
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Sequence
Sequence
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Publication No. US2002002202A1

Sequence 1, Application No. US2002002202A1

SEQUENCE INFORMATION:

APPLICANT: Marner C. Greene

APPLICANT: Warner C. Greene

APPLICANT: Ulrich Schubert

APPLICANT: Ulrich Schubert

APPLICANT: OF INVENTION: COMPOSITIONS AND METHODS FOR DELIVERY OF

TITLE OF INVENTION: A MOLECULE INTO A CELL

FILE REFERENCE: G&C 30448.91-US-UZ

CURRENT APPLICATION NUMBER: US/09/839,329

CURRENT APPLICATION NUMBER: 60/266,610

PRIOR FILING DATE: 2000-05-23

PRIOR FILING DATE: 2000-05-23

PRIOR FILING DATE: 2001-04-20

SPRIOR FILING DATE: 2001-04-20

PRIOR FILING DATE: 2001-05-30

NUMBER OF SEQ 1D NOSE: 5

SOFTWARE: FRAESEQ for Windows Version 4.0
US-10-190-435-270
US-10-190-435-271
US-10-190-435-255
US-10-190-435-255
US-10-190-435-283
US-10-296-734-1475
US-10-296-734-1475
US-10-190-435-258
US-10-190-435-267
US-10-190-435-267
US-10-190-435-267
US-10-190-435-269
US-10-190-435-269
US-10-190-435-282
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                        US-09-839-329-1
   SEQ ID NO 1
LENGTH: 96
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1 ETYGDTWAGVEAIRILQOLLFIHFRIGCRHSRIGVTRORRARNGASRS

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Sequence 272, Application US/10190435
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ORGANISM: Artificial Sequence
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Matches 44; Conserv
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Matches 45; Conserve
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US-10-190-435-262
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APPLICANT: LIAN, Ying
APPLICANT: ENGELBRECHT, Susan
APPLICANT: ENGELBRECHT, Susan
TITLE OF INVENTION: POLYNECLEOTIDE SHOODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYNEPTIDES, POLYPEPTIDES AND USES THEREOF
FILE REFERENCE: PP18133.003 / 2302-18133
CURRENT FAPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
SOFTWARE: Patentin Ver. 2.0
LENGTH: 96
TYPE: pr
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48 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS 96
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100.0%; Pred. No. 1.5e-28;
live 0; Mismatches 0;
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                                                                                                                                                                      Sequence 272, Application US/10059261
Publication No. US20030077826A1
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Best Local Similarity
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US-10-059-261-272
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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: 2UR MEGEDE, Jan
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
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APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: POSTERERECHT, Susan
APPLICANT: POLYPEPTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
FILE REPRENCE: PP18133.003 / 2302-18133
CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
SOFTWARE: PALENTIN Ver. 2.0
SEQ ID NO 272
LENGTH: 96
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; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV005-81
US-10-190-435-272
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Publication No. US20030143248A1
GENERAL INFORMATION:
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; GENERAL INFORMATION:
; APPLICANT: ZUR MEGEDE, Jan
; APPLICANT: BARNETT, Susan W.
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RESULT 4 US-10-190-435-272

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| Publication No. US20030143248A1
| Publication No. US20030143248A1
| GENERAL INPOWNATION:
| APPLICANT: UR MEGEDE, Jan
| APPLICANT: LIAN, Ying
| APPLICANT: LIAN, Ying
| APPLICANT: ENGEBRECHT, Susan
| APPLICANT: WAN RENSBURG, Estrelita J.
| TITLE OF INVENTION: POLYMPEPTIDES, POLYPEPTIDES AND USES THEREOF
| TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
| TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
| CURRENT APPLICATION NUMBER: US/10/190,435
| CURRENT FILING DATE: 2002-12-30
| NUMBER OF SEQ ID NOS: 319
| SOFTWARE: PATENTING DATE: 2002-12-30
| SEQ ID NO 274
| LENGTH: 96
                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV004-45 US-10-190-435-262
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APPLICANT: EARNETT, Susan W.
APPLICANT: LIAN, Ying
APPLICANT: ENGELBRECHT, Susan
APPLICANT: VAN RENSBURG, Estrelita J.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
APPLICANT: ENGELBRECHT, Susan
APPLICANT: VAN RENSBURG, ESTRELITA J.
TITLE OF INVENTION: POLYNOCLEOTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYNOCLEOTIDES, POLYPEPTIDES AND USES THEREOF
FILE REFERENCE: PP18133 003 / 2302-18133
CURRENT PPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
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89.8%; Pred. No. 3e-26;
tive 3; Mismatches 2; Indels
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Publication No. US20030143248A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 89.8
Matches 44, Conservative
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Best Local Similarity
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US-10-190-435-278
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LENGTH: 96
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; OTHER INFORMATION: Description of Artificial Sequence: Vpr 301905-Ind
US-10-190-435-278
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Sequence 263, Application US/10190435

Publication No. US20030143248A1

GENERAL INFORMATION:
APPLICANT: BARNETT, Susan W.
APPLICANT: BARNETT, Susan W.
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: ENGELBRECHT, Susan
APPLICANT: WAN RENBENGE, Betealita J.
TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF
TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES
CURRENT PPLING DATE: 2003 / 2302-18133
CURRENT FILING DATE: 2003 / 2302-1813

SOFTWARE: PATENTY OF SEQ ID NOS: 319
SOFTWARE: PATENTY OF SEQ ID NOS: 319
SEQ ID NO 263
LENGTH: 96
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APPLICANT: BARNETY, Susan W.
APPLICANT: LIAN, Ying
APPLICANT: ENGELBRECHT, Susan M.
APPLICANT: WAN RENSBURG, Estrelita J.
TITLE OF INVENTION: POLYMPTIDES ENCODING ANTIGENIC HIV TYPE C
TITLE OF INVENTION: POLYMPTIDES, POLYMPTIDES AND USES THEREOF
FILE REFERENCE: PP1813.003 / 2302-18133
CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT APPLICATION NUMBER: 202-12-30
NUMBER OF SEQ ID NOS: 319
SOFTWARE: PATERIL VET. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 92.5%; Score 235; DB 14; Length 96; Best Local Similarity 89.8%; Pred. No. 8.2e-26; Matches 44; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 92.1%; Score 234; DB 14; Length 96; Best Local Similarity 87.8%; Pred. No. 1.1e-25; Matches 43; Conservative 4; Mismatches 2; Indels
                       CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 278
LENGTH: 96
FILE REFERENCE: PP18133.003 / 2302-18133
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Publication No. US20030143248A1
GENERAL INFORMATION:
                                                                                                                                                                                                                            TYPE: PRT ORGANISM: Artificial Sequence
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Query Match
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Publication No. US20030143248A1

Fublication No. US20030143248A1

GENERAL INFORMATION:

APPLICANT: ZUM MEGEDE, Jan

APPLICANT: ELIAN, Ying

APPLICANT: ENGELBEECH, Susan

APPLICANT: ENGELBEECH, Susan

APPLICANT: UNN RENSBURG, Estrelita J.

APPLICANT: VAN RENSBURG, Estrelita J.

APPLICANT: VAN RENSBURG, Estrelita J.

TITLE OF INVENTION: POLYMETENTES, POLYPEPTIDES AND USES THEREOF

TITLE OF INVENTION: POLYMETENTES, POLYPEPTIDES AND USES THEREOF

TITLE OF INVENTION: NUMBER: US/10/190,435

CURRENT APPLICATION UNDER: 2002-12-30

NUMBER OF SEQ ID NOS: 319

SOFTWARE: PATENTE OF SEQ ID NOS: 319

SEQ ID NO 264

LENGTH: 96
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APPLICANT: ZUR MEGEDE, Jan
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: ENGELBRECHT, Susan
APPLICANT: ENGELBRECHT, Susan
APPLICANT: WAN RENSBURG, Estrelita J.
TITLE OF INVENTION: POLYNUCLEOTIDES ENCODING ANTIGENIC HIV TYPE C;
TITLE OF INVENTION: POLYNEPTIDES, POLYPEPTIDES AND USES THEREOF;
FILE REFERENCE: PP18133.003 / 2302-18133
CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT FILING DATE: 2002-12-30
NUMBER OF SEQ ID NOS: 319
SOCTWARRE: Patentin Ver. 2.0
SEQ ID NO 276
LENGTH: 96
                                                                                                      ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV012-4
US-10-190-435-273
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                                                                                                                                                                                                          Query Match 92.1%; Score 234; DB 14; Length 96; Best Local Similarity 91.7%; Pred. No. 1.1e-25; Matches 44; Conservative 2; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Sequence 276, Application US/10190435; Publication No. US20030143248A1; GENERAL INFORMATION:
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ORGANISM: Artificial Sequence
FEATURE:
                                                       TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
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SEQ ID NO 273
                           LENGTH: 96
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Gaps
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Sequence 265, Application US/10190435

Publication No. US20030143248A1

GENERAL INFORMATION:

APPLICANT: UNR MEGEDE, Jan

APPLICANT: LIAN, Ying

APPLICANT: LIAN, Ying

APPLICANT: USBERREFT, Susan W.

APPLICANT: BARNETT, Susan W.

APPLICANT: BARNETT, Susan W.

APPLICANT: PREBERRECET, Susan

APPLICANT: PREBERRECET, Susan

APPLICANT: PREBERRECET, Susan

APPLICANT: PARTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF

TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF

TITLE OF INVENTION: US/10/190,435

CURRENT APPLICATION NUMBER: US/10/190,435

CURRENT PILING DATE: 2002-12-30

NUMBER OF SEQ ID NOS: 319

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 265

LENGTH: 96
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APPLICANT: ZUR MEGEDE, Jan
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: LIAN, Ying
APPLICANT: WIGHERERFY, Satrelita J.
TITLE OF INVENTION: POLYMERTIDES, POLYPERTIDES AND USES THEREOF;
TITLE OF INVENTION: POLYMERTIDES, POLYPERTIDES AND USES THEREOF;
TITLE OF INVENTION: POLYMER: US/10/190,435
CURRENT APPLICATION NUMBER: US/10/190,435
CURRENT APPLICATION NUMBER: US/10/190,435
NUMBER OF SEQ ID NOS: 319
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 266
LENGTH: 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV002-84 US-10-190-435-266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV018-8 US-10-190-435-265
; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV018-7
US-10-190-435-264
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                                                                                                                                                                                                             49
                                                                                                                                                                                                                                          48 DTYGDTWMGVEALIRILQQLLFIHFRIGCQHSRIGIIRQRRARNGASRS 96
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                                                                                                                                                                                                                1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
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                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               91.7%; Score 233; DB 14;
ilarity 87.8%; Pred. No. 1.6e-25;
Conservative 4; Mismatches 2;
                                                                                               Score 233; DB 14;
Pred. No. 1.6e-25;
4; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 233; DB 14;
Pred. No. 1.6e-25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 266, Application US/10190435 Publication No. US20030143248A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Artificial Sequence
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87.8%;
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ORGANISM: Artificial Sequence
                                                                                                  Query Match
Best Local Similarity 87.8%;
Matches 43; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 43; Conserva
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                     US-10-190-435-265
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    Gaps
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                                                                                                                                           RESULT 15
US-10-190-435-270

i Sequence 270, Application US/10190435

i Publication No. US20030143248A1

i GENERAL INFORMATION:

A APPLICANT: ELIN MEGEBE, Jan

A APPLICANT: LIAN, Ying

A PPLICANT: ENGELBRECHT, Susan

A APPLICANT: BARNETT, Susan

A APPLICANT: BARNETT, Susan

A PPLICANT: BUGELBRECHT, Susan

A PPLICANT: POLYPEPTIDES ENCODING ANTIGENIC HIV TYPE C

TITLE OF INVENTION: POLYPEPTIDES, POLYPEPTIDES AND USES THEREOF

TITLE OF INVENTION NUMBER: US/10/190,435

CURRENT FILING DATE: 2002-12-30

NUMBER: OF SEQ ID NOS: 319

SOFTWARE: PATENTIN Ver. 2.0

SEQ ID NO 270

LENGTH: 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Vpr TV003-12
US-10-190-435-270
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                                      Query Match 91.7%; Score 233; DB 14; Length 96; Best Local Similarity 87.8%; Pred. No. 1.6e-25; Matches 43; Conservative 4; Mismatches 2; Indels
    2; Indels
  4; Mismatches
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ORGANISM: Artificial Sequence
43; Conservative
Matches
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Search completed: October 18, 2004, 18:52:23 Job time: 89.8125 secs

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GenCore version 5.1.6
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                    Copyright
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protein search, using sw model OM protein

October 18, 2004, 18:38:31; Search time 17.3542 Seconds (without alignments) 271.671 Million cell updates/sec Run on:

US-09-913-927D-3 254 Title: Perfect score:

1 ETYGDTWAGVEAIIRILQQL.........RHSRIGVTRQRRARNGASRS 49 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 segs, 96216763 residues Searched:

283416 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB E Maximum DB E

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES	Description	1444 vor protein - huma	o vor protein	vpr protein -	ypr protein -	vpr protein -	protein -	vpr protein -	vpr protein -	vpr protein -	vpr protein ~	vpr protein -			ıda .	gene R protein	vpr	vpr protein -	vpr protein -	vpu protein -	ABC-type trans	hypotheti	probable inte	E81225 hypothetical prote	7 glycine betai	=#	7 hypothetical	27 hypothetical	71 conserved hyr	
	Ω	T094	S5438	T0167	T0938	D44	ASI	507	T11	S53	808	ASI	ASI	ASI	ASI	803	ASI	ASI	812	ASI	C97	T42	H81	E81	AI346	B5522	H958	G844	F691,	
	DB	~	~	7	7	٦	Н	N	~	~	~	Н	Н	Н	7	N	-	-	~	-	~	N	~	N	~	~	~	7	~	
	Query Match Length	96	96	96	95			89	101	105	101	122	105	101	104	97	104	105	105	119	314	178	328	328	454	275	311	532	341	
ď	Query Match	98.0	96.1	92.5	91.9	0.06	80.7	47.2	47.2	7	46.5	46.1	45.7	45.3	4.	43.	43.	43.	4,	26.	22.	21.	21.	21.	21.	21.	21.	20.	20.	
	Score	249	244	235	233.5	228.5	205	120	120	120	118	117	116	115	113	111	110.5	110	108	67.5	56.5	55.5	54.5	54.5	54.5	53.5	53.5	53	52.5	
	Result No.	-	7	m	4	വ	9	7	æ	σ	10	11	12	13	14	15			18	19	20	21	22	23	24	52	56	27	28	

hypothetical prote hypothetical prote	hypothetical prote triacylglycerol li	amino acid ABC tra ABC amino acid tra	hypothetical prote hypothetical prote	hypothetical prote hypothetical prote	alcohol dehydrogen GTP-binding protei	hypothetical prote probable RNA-bindi	2-oxoglutarate deh E5b protein - huma
F86431 A72379	T40877 JQ1277	F72108 G86514	T20753 AE1328	B87606 A42283	AD3391 B87288	AF2118 A96747	E89918 D61055
00	01 01	N N	01 00	0 0	0 0	0 0	0 0
292 328	399 449	226 226	659 96	147	342 354	408 753	910
20.3	20.3	19.9	19.9	19.7	19.7	19.7	19.7 19.5
51.5 51.5	51.5 51	50.5	50.5	20	50 50	20	50 49.5
30	33	34 35	36 37	38 39	4 4 1 1	4 4 3 6	44 45

ALIGNMENTS

		n - himan imminodeficiency viris type 1
		,
J 1	4	rotein

vpr protein - human immunodeficiency virus type 1 (strain JRFL)
C;Species: human immunodeficiency virus type 1, HIV-1
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004

C;Accession: T00444
R;Pang, S.; Vinters, H.V.; Akashi, T.; O'Brien, W.A.; Chen, I.S.; Koyanagi, Y.; Namazie, Bubmitted to the EMBL Data Library, July 1996
A;Reference number: Z16673
A;Accession: T09444
A;Accession: T09444
A;Accession: T09444
A;Reference number: Left A;Accession: T09444
A;Reference number: DNA
A;Returns preliminary; translated from GB/EMBL/DDBJ
A;Residues: 1-96 < PAN>

A;Cross-references: UNIPROT:Q757; EMBL:U63632; NID:g1465777; PID:g1465784 C;Genetics:

A,Gene: vpr C,Superfamily: AIDS vpr protein

Gaps ô Length 96; Indels Score 249; DB 2; Lv Pred. No. 7.6e-28; 2; Mismatches 0; Query Match
Best Local Similarity 95.9%;
Matches 47; Conservative 2

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49 ETYGDTWAGVEAIIRILQQLLFIHFRIGCQHSRIGITRQRRARNGASRS 96 1 ETYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS ð g

Uprotein - human immunodeficiency virus type 1
C;Species: human immunodeficiency virus type 1, HIV-1
C;Species: human: S54380
R;Theodore, T.; Bucklex-White, A.J.
Submitted to the EMBL Data Library, July 1989
A;Accession: S54380
A;Accession: S54380
A;Accession: S54380
A;Status: preliminary
A;Nolecule type: genomic RNA
A;Residues: 1-96 <THE>
A;Coss-references: UNIPROT:P12519; EMBL:M22639; NID:g329377; PIDN:AAA45368.1; PID:g32936C;Superfamily: AIDS vpr protein

ö Query Match 96.1%; Score 244; DB 2; Length 96; Best Local Similarity 91.8%; Pred. No. 3.8e-27; Matches 45; Conservative 4; Mismatches 0; Indels

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Gaps

ò g 1;

Gaps

1; 4

Length 97;

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User protein - simian immunodeficiency virus SIVsm (isolate F236)
C; Species: simian immunodeficiency virus SIVsm
A;Note: host Cercocebus torquatus atys (socty mangabey)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004
C;Accession: 807991
R;Hirsch, V.M.; Olmsted, R.A.; Murphey-Corb, M.; Purcell, R.H.; Johnson, P.R.
Natures 139, 389-382, 1999
A;Title: An African primate lentivirus (SIV(sm)) closely related to HIV-2.
A;Reference number: 804237; MUID:89262053; PMID:2786147
A;Reference number: 804237; MUID:89262053; PMID:2786147
A;Accession: 807991
A;Status: nucleic acid sequence not shown; translation not shown
A;Molecule type: genomic RNA
A;Residues: 1-89 cHIR>
A;Residues: 1-89 cHIR>
A;Residues: 1-89 cHIR>
A;Cross-references: UNIPROT:P12521; EMBL:X14307; NID:g61741; PIDN:CAA32486.1; PID:g61745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:P17287; EMBL:X52154; NID:g58866; PIDN:CAA36403.1; PID:g58870
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                    Ver protein - simian immunodeficiency virus SIVcpz
Cispecies: simian immunodeficiency virus SIVcpz
Cispecies: simian immunodeficiency virus SIVcpz
A;Note: host Pan troglodytes (chimpanzee)
C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 09-Jul-2004
C;Accession. S0998
R;Huet, T:; Cheynier, R:; Meyerhans, A:; Roelants, G:; Wain-Hobson, S.
Nature 345, 356-359, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Title: Genetic organization of a chimpanzee lentivirus related to HIV-1. A; Reference number: S09983; MUID: 90259077; PMID: 2188136
A; Accession: S09986
A; Status: nucleic acid sequence not shown; translation not shown
A; Molecule type: DNA
A; Residues: 1-96 < HUE>
                                                                                                                                                                                                                                                 48 ETYGDTWAGVEAIIRILQQLLFIHFRIGCQHSRIGIIQQRRARRNGASRS 97
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                                                                                                                                                                                                                 1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRA-RNGASRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 80.7%; Score 205; DB 1; Length 96; Best Local Similarity 75.5%; Pred. No. 1.3e-21; Matches 37; Conservative 6; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10; Indels
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                                                                                                          DB 1;
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Pred. No. 1.2e-09;
5; Mismatches 10
                                                                                                    A,Gene: vpr
C,Superfamily: AIDS vpr protein
C,Keywords: AIDS; immunodeficiency
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Superfamily: AIDS vpr protein
C;Keywords: AIDS; immunodeficiency
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ilarity 60.5%;
Conservative
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C;Superfamily: AIDS vpr protein
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Best Local Similarity
Matches 45; Conserv
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Best Local S
Matches 23
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                                                                                                                                                                                                                                                                                                                                                                 RESULT 6
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D44001

vpr protein - human immunodeficiency virus type 1 (strain VU-2)
N;Alternate names: orf-R protein
C;Species: human immunodeficiency virus type 1, HIV-1
A;Note: host Homo sapiens (man)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
C;Accession: D44001
R;Li, Y; Hul, H:; Burgess, C.J.; Price, R.W.; Sharp, P.M.; Hahn, B.H.; Shaw, G.M.
J; Virol: 66, 6587-6600, 1992
A;Title: Complete nucleotide sequence, genome organization, and biological properties of A;Accession: D44001
A;Accession: D44001
A;Molecule type: DNA
A;Accession: D44001
A;Molecule type: DNA
A;Accession: UNIPROT:P35967; GB:M93258
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vpr protein - human immunodeficiency virus type 1 (isolate cntrl 1)
C.Species: human immunodeficiency virus type 1, HIV-1
A,Variety: isolate cntrl 1
C.Scession: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
C.Accession: T09383
R;Michael, N.L.; Chang, G.; d'ARCY, L.A.; Ehrenberg, P.K.; Mariani, R.; Busch, M.P.; Bir J. Virol. 69, 4228-4236, 1995
A. Mirtle: Defective accessory genes in a human immunodeficiency virus type 1-infected lor A;Reference number: Z16654; MUID:95287475; PMID:7769682
                                                                                                                                                                                                                                                                                               A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-96 AAL1-
A;Cross-references: UNIPROT:P05955; EMBL:K03456; NID:g60228; PIDN:CAA28014.1; PID:g60232
C;Superfamily: AIDS vpr protein
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                                                                                                                                                                                                                       sequence analysis of two isol
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                                                         vpr protein - human immunodeficiency virus type 1
C,Species: human immunodeficiency virus type 1, HIV-1
C,Date: 19-Feb-1999 #sequence_revision 19-Feb-1999 #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 235; DB 2; Length 96;
Pred. No. 7.2e-26;
3; Mismatches 2; Indels
                                                                                                                                 C;Accession: T01670
R;Alizon, M.; Wain-Hobson, S.; Gluckman, J.C.; Sonigo, P. Ccll 46, 63-74, 1986
A;Title: Genetic variability of the AIDS virus: Nucleotide A;Reference number: Z14389; MUID:86245056; PMID:2424612
A;Accession: T01670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-95 <MIC>
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C,Superfamily: AIDS vpr protein
C,Keywords: AIDS; immunodeficiency
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89.8%;
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Matches 44; Conservative
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Best Local Similarity
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A,Gene: vpr C,Superfamily: AIDS vpr protein C,Keywords: AIDS; immunodeficiency

Local Similarity 60.5 hes 23; Conservative

Query Match Best Local S Matches 23

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C;Accession: E26737

R;Hirsch, V.; Riedel, N.; Mullins, J.I.
Cell 49, 307-319, 1987
A;Title: The genome organization of STLV-3 is similar to that of the AIDS virus except fc A;Reference number: A26737; MUID:87187627; PMID:3646094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Accession: H26262
R;Guyader, M.; Emerman, M.; Sonigo, P.; Clavel, F.; Montagnier, L.; Alizon, M.
Rsduye 326, 662-669, 1987
A;Title: Genome organization and transactivation of the human immuno-deficiency virus tyr
A;Reference number: A26262; MUID:87173056; PMID:3031510
A;Accession: H26262
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A;Residues: 1-105 <GUY>
A;Cross-references: UNIPROT:P06938; GB:M15390; NID:g1332361; PIDN:AAB00767.1; PID:g325746
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vpr protein - human immunodeficiency virus type 2 (isolate ROD)
NiAlternate names: orf-R protein
C:Species: human immunodeficiency virus type 2, HIV-2
C:Species: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                               Score 118; DB 2;
Pred. No. 2.6e-09;
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46.1%; Score 117; DB 1;
Best Local Similarity 57.5%; Pred. No. 4.4e-09;
Matches 23; Conservative 6; Mismatches 11
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                                                                                                                                                                                                                                                                                                                                                                                  3 YGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIG 35
                                                                                                                                                                                                                                                                                                                                                                                                                                         S5 HGDTLAGAGELIKILQRALFLHFRAGCQHSRIG 87
                                                                                                                                                                                                                                                                                   6; Mismatches
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C; Keywords: AIDS; immunodeficiency
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Best Local Similarity 63.6%;
Matches 21; Conservative
                                        A,Gene: vpr
C,Superfamily: AIDS vpr protein
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A; Residues: 1-122 <HIR>
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C, Genetics:
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Matches
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                    TIS63

TIS63

Cyprotein - simian immunodeficiency virus SIVsm (strain E543)

Cyprotein - simian immunodeficiency virus SIVsm

Cybrotein - simian immunodeficiency virus SIVsm

A, Variety: strain E543

C, Date: i6-Jul.1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004

C, Date: i6-Jul.1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004

C, Date: i7-Jul.1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004

C, Agecssion: Til563

A, Title: A molecularly cloned, pathogenic, neutralization-resistant simian immunodeficient in the strain in the strain immunodeficient in the strain in the strain in the strain in in the strain in the st
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S53095
VPT protein - human immunodeficiency virus type 2
VPT protein - human immunodeficiency virus type 2
C; Species: human immunodeficiency virus type 2
C; Species: 08-Jul-1995 #sequence_revision 21-Jul-1995 #text_change 09-Jul-2004
C; Accession: S53095
R; Becker, M.; Becker, A.; Habermehl, K.O.
submitted to the EMBL Data Library, March 1995
A; Description: Molecular and phylogenetic characterisation of a Guinea-Bissau-derived hu
A; Reference number: S53091
A; Recension: S53095
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-105 <BEC>
A; Cross-references: UNIPROT:Q76624; EMBL:Z48731; NID:g732718; PIDN:CAAB8624.1; PID:g7327
C; Superfamily: AIDS vpr protein
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A;Rolecule type: DNA
A;Residues: 1-101 < DIS
A;Coss-references: UNIPROT:P15837; EMBL:X16109
A;Note: this sequence was submitted to the EMBL Data Library, Aug-1989
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Pred. No. 1.4e-09;
3; Mismatches 10; Indels
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Query Match 47.2%; Best Local Similarity 63.9%; Matches 23; Conservative

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Gaps

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Length 97;

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Query Match
43.7%; Score 111; DB 2; Length 97
Best Local Similarity 63.6%; Pred. No. 2.5e-08;
Matches 21; Conservative 4; Mismatches 8; Indels
                                                                                                                                                                                                                                                                                                                      3 YGDTWAGVEALIRILQQLLFIHFRIGCRHSRIG 35
                                                                                                                                                                                                                                                                                                                                                                             Search completed: October 18, 2004, 18:48:21
Job time : 18.3542 secs
                                   C, Superfamily: AIDS vpr protein
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Vpr protein - simian immunodeficiency virus (macaque isolate)

NyAlternate names: orf-R protein
C;Species: simian immunodeficiency virus, SIV
C;Date: 30-Jun-1999 #sequence_revision 30-Jun-1989 #text_change 16-Jul-1999
C;Date: 30-Jun-1999 #sequence_revision 30-Jun-1989 #text_change 16-Jul-1999
C;Accession: E28887
R;Chakrabarti, L.; Guyader, M.; Alizon, M.; Daniel, M.D.; Desrosiers, R.C.; Tiollais, P. A;Title: Sequence of simian immunodeficiency virus from macaque and its relationship to A;Reference number: A28887
A;Accession: E28887
A;Accession: E28887
A;Accession: E28887
A;Accession: E28887
A;Cross-references: GB:Y00277; GB:MI6403; NID:g61730; PIDN:CAA68383.1; PID:g61735
C;Genetics:
A;Gene: vpx
C;Superfamily: AIDS vpr protein
C;Keywords: AIDS; immunodeficiency
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PURP protein - human immunodeficiency virus type 2 (isolate CAMZ/Guinea-Bissau)
N;Alternate names: orf-R protein
C;Species: human immunodeficiency virus type 2, HIV-2
C;Species: human immunodeficiency virus type 2, HIV-2
C;Species: human immunodeficiency virus type 2, HIV-2
C;Species: human immunodeficiency virus type 2, HIV-2
C;Species: human immunodeficiency virus type 2, HIV-2
C;Species: Max-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C;Accession: B38475, JQ0977
A;Title: Nucleotide sequence of a Guinea-Bissau-derived human immunodeficiency virus type A;Reference number: A38475, MUD:91170959; PMID:2005437
A;Residues: L-104 <TRIS
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Content Protein - human T-cell lymphotropic virus type 4
Content Protein - human T-cell lymphotropic virus type 4, HTLV-4
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45.3%; Score 115; DB 1; Length 101;
Best Local Similarity 66.7%; Pred. No. 7e-09;
Matches 22; Conservative 3; Mismatches 8; Indels
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Query Match

Best Local Similarity 58.3%; Pred. No. 1.4e-08;

Matches 21; Conservative 4; Mismatches 11; Indels
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C;Superfamily: AIDS vpr protein
C;Keywords: AIDS; immunodeficiency
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Q9ibn7
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GenCore version 5.1.6
(c) 1993 - 2004 Compugen Ltd
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Maximum Match 100%
Listing first 45 summaries
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O7013U7
O903U7
O903U8
O91QB8
V9R_HV1BR
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                                                                                                                                                                                                    Human immunodeficiency virus type 1 (New York-5 isolate) (HIV-1).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11698;
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                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
Buckler C.E., Buckler-White A.J., Willey R.L., McCoy J.;
Submitted (JUN-1988) to the EMBL/GenBank/DDBJ databases.
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; Pred. No. 7.4e-27;
0; Mismatches 0;
                                                                                        (Rel. 12, Created)
(Rel. 33, Last sequence update)
(Rel. 45, Last annotation update)
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VPR HYLJR
1D VPR HYLJR STANDARD; 1
C P20883;
DT 01-FEB-1991 (Rel. 17, Created)
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                                                                                        01-OCT-1989 (Rel. 12, Created 01-FEB-1996 (Rel. 33, Last 80 01-OCT-2004 (Rel. 45, Last and VPR protein (R ORF protein).
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                                              STANDARD;
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Best Local Similarity
                                              VPR HV1N5
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RESULT 1
VPR_HV1N5
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Matches
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Vpr protein.
VPR.
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AAR24628;
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                                                      Q9IBN7
Q9IBN7;
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                                       Q9IBN7
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                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profilt institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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SUCURNCE IN SUCURING E., Poveda E., Martinez-Padial M., Rodes B., Toro C., Paxinos E., Poveda E., Martinez-Padial M., Rodes B., Toro C., Paxinos E., Poveda E., Martinez-Padial M., Jimenez V., Wrin T., Bassani S., Soriano V.; Pulifferences in disease progression in a cohort of long-term non-progressors after more than 16 years of HIV-1 infection."; ADS 18:1109-1116 (2004).

ENBL; AY444321; AAR24628.1; ...
InterPro; IPRO00012; Retrov_VPR/X.
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                                                          Human immunodeficiency virus type 1 (JRCSF isolate) (HIV-1).
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11688;
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Pred. No. 1e-26;
1; Mismatches 0; Indels
                                                                                                                                                                                  Koyanagi S., Chen I.S.Y.;
Submitted (DEC-1988) to the EMBL/GenBank/DDBJ databases.
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Last annotation update)
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Viruses; Retroid viruses; Retroviridae; Lentivirus
01-FEB-1991 (Rel. 17, Last sequence update) 01-OCT-2004 (Rel. 45, Last annotation update) VPR protein (R ORF protein).
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Best Local Similarity 98.0%;
Matches 48; Conservative
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Q6SZU3;
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Q6SZU3
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STRAIN=subtype B; MBDLINE=91365114; PubMed=1890410; MBDLINE=91365114; PubMed=1890410; Parratt G.H., Roff M.A., Amin T., Ball J., Parrett A.M., Battacharyya U., Booth J., Wansbrough-Jones M.H., Greenaway P.J.; Battacharyya U. a series of human immunodeficiency virus isolates derived sequentially from a single patient."; Amed. virol. 34:104-113(1991).
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SEXDANCE FROM N.A..
SEXBAIN=SUBTYOPE B.;
MEDLINE=20418939; PubMed=10954893;
MOVELLI P., Vella C., Oxford J.S., Daniels R.S.;
Novelli P., Vella C., Oxford J.S., Daniels R.S.;
Type 1GB8.";
AIDS Res. Hum. Retroviruses 16:1175-1178 (2000).
EMBL; AJ27145; CAB92789.1; -.
HSSP; P12520; 1BBE.
InterPro; IPR000012; Retrov_VpR/X.
Pfam; PF00522; VPR; 1.
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STRAIN=subtype B;
MEDLINE=96100812; PubMed=7483788;
Vella C., Smith M.H., Farrar G.H., Jones D.H., Daniels R.S.;
"A molecular and serologic study of the envelope gene of the British isolate: HIV-1 GB8.";
Vaccine 13:735-741(1995).
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Last annotation update)
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                                           Created)
Last sequence update)
Last annotation update)
                                                                                                                                                       Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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Pred. No. 1e-26;
1; Mismatches 0.
  96 AA.
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PRT;
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Best Local Similarity 98.0
Matches 48; Conservative
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                                             01-OCT-2000 (TrEMBLrel.
01-OCT-2000 (TrEMBLrel.
01-MAR-2004 (TrEMBLrel.
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Score 252; DB 2; L Pred. No. 1.4e-26; 2; Mismatches 0;

99.2%;

Length 96;

C1BD60F1048E5036 CRC64;

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96 AA; 11346 MW;
      PRINTS; PR00444; HIVVPRVPX
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Name=vpr;
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Rhodes D.I., Ashton L., Solomon A., Carr A., Cooper D., Kaldor J.,
Deacon N.;
Interacterization of three nef-defective HIV-1 strains associated with
long term nonprogression.";
J. Virol. 0:0-0(2000).
BIMBL, AY006000, AAG32143.1; -.
HSSP; P12520; 1BDE.
InterPro; IPR000012, Retrov_VpR/X.
Pfam; PF00522; VPR; 1.
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Rodes B., Toro C., Paxinos E., Poveda E., Martinez-Padial M., Jimenez V., Wrin T., Bassani S., Soriano V.; "Differences in disease progression in a cohort of long-term non-progressors after more than 15 years of HIV-1 infection."; Submitted (OCT-2003) to the EMBL/GenBank/DDBJ databases. EMBL, AY444321; AAR24628.1; -. SEQUENCE 96 AA; 11353 MW; 9576F43AFEDB1244 CRC64;
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                                                                                                                                                                Length 96;
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Oblitions R.B., McPhee D.A., Deacon N.J.;
Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
EMBL; AF042103; AAD03219.1; -..
HSSP; P12520; LDSJ.
InterPro; IPRO00012; RetroV_VPR/X.
Pfam; PF00522; VPR; 1.
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Last annotation update)
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-UN-2003 (TrEMBLrel. 24, Last annotation update)
Vpr protein.
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Viruses; Retroid viruses; Retroviridae; Lentivirus
VCBI_TaxID=11676;
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Viruses; Retroid viruses; Retroviridae; Lentivirus
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98.0%; Pred. No. 1e-26;
iive 1; Mismatches 0;
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95.9%; Pred. No. 1.4e-26;
ive 2; Mismatches 0
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Best Local Similarity 95.97
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tes 48; Conserv
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SEQUENCE FROM N.A.
Sanchez G.I., Carrion G., Eyzaguirre L., Arias S., Negrete M.,
Montano S., Perez J., Russell K.L., Sateren W., Birx D.L., Carr J.K.,
Sanchez J.L.;
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STRAIN=PCN031;
Sanchez G.I., Carrion G., Eyzaguirre L., Arias S., Negrete M.,
Montano S., Perez J., Russell K.L., Sateren W., Birx D.L., Carr J.K.,
Sanchez J.L.;
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                               BIYGDTWAGVEAIIRVLQQLLFIHFRIGCRHSRIGITRQRRARNGASRS
  1 ETYGDTWAGVEALIRILQQLLFIHFRIGCRHSRIGVTRORRARNGASRS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases. EMBL; AY561244; AAS86190.1; -. InterPror; IPR0000012; Retrov_VpR/X. Pfam; PF00522; VPR; 1. PRINTS; PR00444; HIVVPRVPX.
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                                                                                                                                                                                                                                               05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
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Viruses; Retroid viruses; Retroviridae; Lentivirus;
Primate lentivirus group.
NCBI_TaxID=11676;
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Last annotation update)
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Pred. No. 1.9e-26;
2; Mismatches 0;
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Best Local Similarity 95.9%;
Matches 47; Conservative
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14-APR-2004 (TrEMBLrel. 27,
14-APR-2004 (TrEMBLrel. 27,
14-APR-2004 (TrEMBLrel. 27,
                                                                                                                                                                                              PRELIMINARY;
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Local Similarity
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Best Local Similarity
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                  NCBI_TaxID=11676;
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                                                          SECUENCE
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                               1 ETYGDTWAGVEAIIRILQQLLFIHFRIGCRHSRIGVTRQRRARNGASRS
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                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus type 1 (BRU isolate) (HIV-1)
Pred. No. 1.98-26;
                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE-8509933; PubMed=2981635;
Wain-Hobson S., Sonigo P., Danos O., Cole S., Alizon M.;
"Nucleotide sequence of the AIDS virus, LAV.";
Cell 40:9-17(1985).
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Buckler C.E., Buckler-White A.J., Willey R.L., McCoy J.;

Submitted (JUN-1988) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H -> Y (in Ref. 2).
N -> S (in Ref. 2).
Q -> N (in Ref. 2).
Q -> N (in Ref. 2).
; 42892A4186E83D3E CRC64;
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Last annotation update)
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Name=vpr;
Human immunodeficiency virus 1.
Viruses; Retroid viruses; Retroviridae; Lentivirus.
                                                                                                                                                                                                                                                          (Rel. 09, Created)
(Rel. 09, Last sequence update)
(Rel. 44, Last annotation update)
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                                     2; Mismatches
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Pfam; PF00522; VPR; 1.
PRINTS; PR00444; HIVVPRVPX.
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28 28 N
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96 AA; 11295 MW; '
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                95.98;
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                                         47; Conservative
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HIV; M19921; VPR$NL43.
                  Best Local Similarity
Matches 47; Conserv
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01-NOV-1988
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=86218077; PubMed=2423250; Starcich B.R., Hahn B.H., Shaw G.M., McNeely P.D., Modrow S., Wolf H., Starcich B.R., Parks W.P., Josephs S.F., Gallo R.C., Wong-staal F.; Parks B. M.P., Josephs S.F., Gallo R.C., Wong-staal F.; "Identification and characterization of conserved and variable regions in the envelope gene of HTLV-III/IAV, the retrovirus of AIDS."; Cell 45:637-648(1986).
                                                   between long-term
immunodeficiency virus type 1
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11701;
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SEQUENCE 96 AA; 11338 MW; 85BC4E4D5CF17741 CRC64;
                                                                                                                                                                                                                                                                                                                        9EAAF998E0B6DD80 CRC64;
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01-NOV-1988 (Rel. 09, Last sequence update)
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VPR protein (R ORF protein).
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MEDLINE=20338596; PubMed=10881687;
                                                                                                                               Arch. Virol. 145:1021-1027(2000).
EMBL, AB034527; BA493974.1; -.
EMSP, P12520; 1BDE.
INTERFOO, IPRO00012.
Pfam; PF00522; VPR; 1.
                                                "Comparison of proviral accessory nonprogressors and progressors of
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HIV; M17451; VPR$RF.
                               Yamada T., Iwamoto A.;
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AIDS Res Hum. Retroviruses 20:465-475(2004).

EMBL, AY358073, AQ98596.1;

InterPro, IPR000012, Retrov_VpR/X.

Pfam; PF00522; VPR; 1.
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Tovanabutra S., Beyrer C., Sakkhachornphop S., Razak M.H., Ramos G.L.,
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Song J., Wang B., Ge Y.C., Dwyer D., Dowton D., Cunningham A.,
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Sakenan N.;
Submitted N.;
Submitted New 1997) to the EMBL/GenBank/DDBJ databases.
EMBL, AF000315; AAB70154.1; -.
HSSP; P122.0; IDSJ.
InterPro, IPR001012; RetroV_VpR/X.
Pfam; PF0052.2; VPR; 1.
PRINTS; PR00444; HIVVPRVPX.
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Viruses; Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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Viruses: Retroid viruses; Retroviridae; Lentivirus.
NCBI_TaxID=11676;
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                                           05-JUL-2004 (TrEMBLrel. 27, Created)
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05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
                                                                                                                                                     Human immunodeficiency virus 1.
Viruses, Retroid viruses; Retroviridae; Lentivirus.
NCBL_TaxID=11676;
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98.0%; Score 249; DB 2; L
Best Local Similarity 95.9%; Pred. No. 3.6e-26;
Matches 47; Conservative 2; Mismatches 0;
96 AA.
PRT;
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InterPro; IPR000012; RetroV_VpR/X.
Pfam; PF00522; VPR; 1.
PRINTS; PR00444; HIVVPRVPX.
PRELIMINARY;
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